DOCUMENT RESUME

ED 346 064 SP 033 824

TITLE	School Health Program. Interim Guide. Grade 9.
INSTITUTION	Northwest Territories Dept. of Education, Yellowknife.
SPONS AGENCY	Department of National Health and Welfare, Ottawa (Ontario).
PUB DATE	88
NOTE	265p.; For related documents, see SP 033 818-823.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	Adolescent Development; Career Awareness; Curriculum Guides; *Educational Objectives; Family Life Education; Foreign Countries; Grade 9; *Health Education; *Health Promotion; Instructional Materials; Junior High Schools; *Lesson Plans; Life Style; Secondary School Curriculum; Teaching Guides; *Teaching Methods
IDENTIFIERS	Northwest Territories

ABSTRACT

This interim guide, a component of the Northwest Territories (Canada) School Health Program, includes instructional strategies, lesson plans, reproducibles, and teacher background materials for ninth grade classes. The material is organized around the three curriculum units: (1) the mental and emotional well-being unit which has three lessons on career and life preparation and positive lifestyles; (2) the growth and development unit which includes lessons on body systems, disease prevention, lifestyle, the health care system, and health careers; and (3) the family life unit which contains lessons on family structure and role, human development and reproduction, teen decisions, and positive lifestyle practices. Each lesson plan contains student objectives, vocabulary, several student activities with corresponding guidelines for the teacher, and student worksheets. Teacher background sections contain factual information, overviews of the unit theme, and suggested teaching methods. (IAH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED346064

Northwest Territories

School Health Program

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D. Crane

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SP033824

Grade 9

BEST COPY AVAILABLE

NORTHWEST TERRITORIES

School Health Program

INTERIM GUIDE

GRADE 9

Northwest Territories EDUCATION
HEALTH

1988

MENTAL AND EMOTIONAL WELL-BEING

GRADE 9

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to
1	CAREER AND LIFE PREPARATION	Personal interests, abilities, attitudes and opportunities influence career and life choices	i) define career ii) identify personal interests, abilities and attitudes that influence career and life choices iii) identify career and life choices that correlate with personal interests, abilities and attitudes iv) examine the requirements for a variety of career and life choices
2	CAREER AND LIFE PREPARATION	Searching for and keeping a job involve specific steps	i) identify the different steps involved in actively searching for a job ii) demonstrate the different steps involved in actively searching for a job iii) identify specific behaviours which help people keep a job
3	LIFESTYLE	Positive lifestyle practices promote health	i) describe the components of a personal lifestyle ii) assess the components of their own mental and emotional lifestyle iii) design a personal program to promote or maintain a healthy mental and emotional lifestyle iv) evaluate the effectiveness of the program

GROWTH AND DEVELOPMENT

GRADE 9

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	BODY SYSTEMS	The immune system helps protect the body from disease	i) describe how germs enter the body ii) describe the body's first two lines of defence iii) describe how the immune system helps protect the body from disease iv) describe common problem conditions related to the immune system
2	BODY SYSTEMS	The body systems work together to promote health	i) classify the body systems according to function ii) explain the inter-relationship of the body systems
3	DISEASE PREVENTION	Non-communicable diseases may be prevented or reduced by positive lifestyle behaviours	i) identify common non-communicable diseases ii) identify the nature and causes of common non-communicable diseases iii) identify lifestyle behaviours which prevent non-communicable diseases
4	LIFESTYLE	Positive lifestyle practices promote health	i) identify positive lifestyle practices that promote healthy growth and development ii) design a personal program to promote healthy growth and development iii) evaluate the effectiveness of the program
5	HEALTH CARE SYSTEM	Each person is responsible for appropriate use of the health care system	i) describe the health care system in the N.W.T. ii) illustrate the cost of health care in the N.W.T. iii) describe responsible use of the health care system
6	HEALTH CAREERS	The health care system offers many opportunities for health careers	i) identify health career opportunities in the N.W.T.

FAMILY LIFE

GRADE 9

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	FAMILIES	Males and females have equal potential	i) describe male and female gender role stereotyping ii) identify factors that contribute to changes in gender role stereotyping
2	FAMILIES	Family members play an important role in meeting the needs of a newborn	i) describe the needs of a newborn ii) explain the roles of family members in meeting the needs of a newborn
3	FAMILIES	Effective parenting enhances family living	i) describe effective parenting ii) demonstrate the parenting skill of encouragement iii) demonstrate the parenting skill of effective communication iv) demonstrate the parenting skill of logical consequences
4	FAMILIES	There are many support systems in the community available to families	i) identify family support systems in the community ii) identify the roles of family support systems iii) describe how to effectively use the systems
5	FAMILIES	The union and development of reproductive cells determine the characteristics of an off-spring	i) describe how the characteristics of an offspring are determined ii) describe how inherited traits determine personal uniqueness iii) describe how the sex of an offspring is determined iv) identify how multiple births are determined
6	HUMAN DEVELOPMENT AND REPRODUCTION	A female's body undergoes physical changes during pregnancy	i) describe the signs of pregnancy ii) describe some characteristics of the three trimesters of pregnancy iii) describe the stages of labour

7	HUMAN DEVELOPMENT AND REPRODUCTION	Positive health behaviours during pregnancy promote maternal and child health	i) describe positive health behaviours during pregnancy that promote maternal and child health
8	TEEN DECISIONS	Opinions differ on how to deal with unplanned pregnancy	i) identify alternatives in dealing with unplanned pregnancy ii) describe how to prevent unplanned pregnancy
9	LIFESTYLE	Positive lifestyle practices promote health	i) identify positive lifestyle practices that promote healthy sexuality and family relationships

GRADE 9

MENTAL AND EMOTIONAL WELL-BEING

MENTAL AND EMOTIONAL WELL-BEING

GRADE: 9 LESSON: 1 THEME: CAREER AND LIFE PREPARATION

CONCEPT: PERSONAL INTERESTS, ABILITIES, ATTITUDES AND OPPORTUNITIES INFLUENCE CAREER AND LIFE CHOICES

PREPARATION:
1. Prepare a class set of What Am I Like? worksheets (Activity Sheet ME70)
2. Prepare a class set of Doing What I Like To Do worksheets (Activity Sheet ME71)
3. Prepare one large card for each category, with blank flipchart paper underneath (Activity Sheet ME72A - 72B Teacher Answer Guide)

VOCABULARY: career, life, job

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) define career	Students: 1. Define the term 'career'.	Background Information: Page ME43 to ME48 Use a dictionary and general discussion to define the term. A career is a chosen course of action through life. Today career does not mean a chosen occupation. It also includes training, different jobs a person holds and even retirement. Career and life preparation involve: - self-assessment (interests, abilities and attitudes) - investigation of job opportunities - making decisions about one's career and life choices

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) identify personal interests, abilities and attitudes that influence career and life choices	2. Complete the What Am I Like? worksheet.	Refer to Activity Sheet ME70. Have students think about what they are like, what they like to do and are good at. Ask them to record their answers on the worksheet. When they are finished, have them give the worksheet to a friend or an adult who knows them well and have the friend or adult write down how they perceive the student. Compare the two responses.
	3. Prepare a list of personal interests, hobbies, abilities and strengths that influence career and life preparation.	Refer to Activity Sheet ME71. It is important that all students know their personal strengths etc., whether they become wage earners, pursue a traditional lifestyle, work at home or for creative use of leisure time. This will help them to feel worthy and valuable in all roles that they assume in the community e.g., doctor, hunter, mother, volunteer. Have students complete the Doing What I Like To Do worksheet. Discuss how knowing what a person likes to do helps him/her make career choices.
iii) identify career and life choices that correlate with personal interests, abilities and attitudes	4. Identify which categories of career/life choices are of most interest to them.	Refer to Activity Sheet ME72A. Refer to Activity Sheet ME72B for answers. Copy, or enlarge, each category of career/life choice onto a large card. Teachers should add any category which would be particularly suited to their community. Place each card at intervals around the room with a sheet of blank flipchart paper below. Divide the class into eight groups. Have each group start at a different category, by reading the card describing the kind of things people in this category do. Brainstorm jobs/careers in that category and write them down on the flipchart paper. Move to the next category and add to the list for that category.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Once each group has completed each category, have students individually write down the following: - the group they think they would be ***most*** suited to - their second choice - their third choice
iv) examine the requirements for a variety of career and life choices	5. Interview a community person whose career/life choice is of interest and prepare a report ***or*** read some booklets or pamphlets about career/life choices of interest and prepare a report.	The following may be used as a guide for writing the report: - qualifications - duties and responsibilities - experience related to their choice - abilities - education - pay - hours of work - place of work

WHAT AM I LIKE?

ME70

Read each item on the list. Decide if the statement describes you or not. Score yourself on each item using the point system:

3 — This is really me!
2 — This is a bit like me!
1 — This is not like me at all!

When you are finished, ask a friend or an adult who knows you well to write down how they see you. Compare the points your friend gives you with what you gave yourself.

Name:	This is really me! (3 points)	This is a bit like me! (2 points)	This is not like me at all! (1 point)	How my friend sees me.
Make friends easily				
Like being with other people				
Good at organizing things				
People ask me for help/advice				
Stick with a job until it is finished				
Have a hobby or sport I do every day				
Neat and tidy				
Good at thinking up new ideas				
Like being the same as other people				
Like a challenge				
Good at math				
Good at following directions				

	This is really me! (3 points)	This is a bit like me! (2 points)	This is not like me at all! (1 point)	How my friend sees me.
Like to work with my hands				
Good at sports				
Can repair snowmobiles, motor bikes etc.				
Like building things				
Flexible				
Ask for help if needed				
Know how I feel about things				
Think about other peoples' feelings				
Easy going				
Know what I want to do				

List the 5 items that are really you!

1. _____

2. _____

3. _____

4. _____

5. _____

Explain how each of those items might help you in your career/life choices
e.g., Like being with other people — would enjoy a job where you meet lots of new people e.g., nurse, working in a store etc.

DOING WHAT I LIKE TO DO

ME71

Think about how you spend your free time. What things are you good at? What are you interested in? What are your hobbies? List **13** things you really like doing.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

Now!!!

- Put an A (for alone) after those things you do by yourself. Put an O+ (for others) after those things you do with other people.

- If the activity needs pre-planning, write a P. If it can be done at the last minute, write L.M.

- Put an S beside any items which are seasonal and a Y beside year round activities.

- Write I after any items where you'd really like to improve your skills.

- Write the date when you last did each item.

- Put a $ after each thing that costs money.

- Put a * beside any item you've been praised or rewarded for.

- Put an F after any activity you learned from a family member.

- Pick the 3 things you like most. Circle them.

- List 3 items which have the possibility of the activity developing into a job.

- How can knowing what you like to do help you identify career possibilities?

WHERE DO I GO FROM HERE?

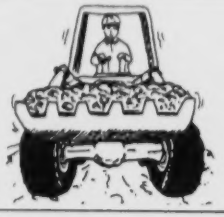
ME72A

Mechanical/Construction
- working with tools
- fixing things
- understanding how things work

Service
- doing things for other people
- working with food
- serving people
- keeping things clean, tidy

Arts/Crafts
- very creative
- expressing themselves in words, drawings, music, acting

Practical
- doing things with their hands
- working machinery



Resource development/management
- like the outdoors
- like working with animals/ plants/rocks
- self-sufficient

Helping/Homemaking
- working with other people
- caring for other people
- organizing things

Clerical
- organizing things
- following directions
- working office equipment

WHERE DO I GO FROM HERE?

ME72B

(Teacher Answer Guide)

Job List

Mechanical/Construction:
- welders
- mechanics
- carpenters
- plumbers
- electricians

Practical:
- bus drivers
- heavy equipment operators
- cab drivers
- bakers
- miners

Clerical:
- secretaries
- file clerks
- bank teller/bookkeepers
- receptionists
- word processors

Service:
- waiters/waitresses
- cooks
- hotel workers
- hairdressers
- store clerks
- Armed Forces
- firefighter
- janitor

Resource Development:
- hunters
- fishers
- trappers
- wildlife officers
- geologists

Arts/Crafts:
- artist
- carver
- sewer
- photographer
- musician
- writer

Helping/Homemaking:
- nurses/doctors
- babysitters
- mothers/fathers
- teachers/day care workers
- social workers
- flight attendants

MENTAL AND EMOTIONAL WELL-BEING

GRADE: 9 LESSON: 2 THEME: CAREER AND LIFE PREPARATION

CONCEPT: SEARCHING FOR AND KEEPING A JOB INVOLVE SPECIFIC STEPS

PREPARATION:
1. Prepare a class set of the Sample Resumé Outline (Activity Sheet ME73)
2. Prepare a class set of the Letter of Application worksheet (Activity Sheet ME74)
3. Prepare a class set of the Sample Application Form (Activity Sheet ME75)
4. Prepare enough Sample Interview Question Sheets for one for each group (Activity Sheet ME76)
5. Prepare a class set of cards with inappropriate work behaviours

VOCABULARY: resumé, application, interview, acceptance, rejection

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: Page ME43 to ME48 * This lesson will require several class periods.
i) identify the different steps involved in actively searching for a job	1. Brainstorm the steps involved in searching for a job.	Pretend that one of the students is looking for a job. S/he needs some advice on how to go about it. The steps involved should include: - identifying own interests, abilities etc. (This was covered in the last lesson.) - identifying where to look for a job - writing a resumé - filling out an application form, writing a letter of application - preparing for a job interview

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) demonstrate the different steps involved in actively searching for a job	2. List where in the community to look for jobs.	Jobs might be found: - through advertisements on community bulletin boards - through advertisements in government offices - in newspaper want ads - at Canada Employment Centres (Inuvik, Ft. Simpson, Ft. Smith, Hay River, Yellowknife, Rankin Inlet, Iqaluit) - at Outreach Projects (Ft. Resolution, Igloolik, Pond Inlet, Pangnirtung, Eskimo Point, Ft. Norman, Tree of Peace in Yellowknife, Rae-Edzo) - by word of mouth - by applying to individual organizations
	3. Write a resumé	Refer to Activity Sheet ME73. Have students use the outline to write their own resume.
	4. Write a letter of application.	Refer to Activity Sheet ME74. Have students choose one of the newspaper want ads on the worksheet and write a letter of application for the job. (A sample letter is included on the worksheet.)
	5. Complete a job application form.	Refer to Activity Sheet ME75. Have students complete the application form.
	6. List some interview tips.	Brainstorm tips people should keep in mind when going for an interview. - Be on time. - Look neat and tidy. - Smile and greet your interviewer as you go in, shake hands. - Try to look confident, even if you are nervous. - Speak clearly. - Ask questions about the position.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		- Try not to fiddle with your hands, bite your nails etc. - Be honest and sincere. - Show how your qualifications match the job. - Be polite. - Watch for clues that the interview is over. - Thank the interviewer.
	7. In small groups, role play a job interview.	Refer to Activity Sheet ME76. Use the sample interview questions as an outline for an interview situation. Each group can perform the roleplay for the rest of the class. The class members can decide to which applicant they would give the job.
	8. List ways to follow up on the interview.	Brainstorm ways people can follow-up on an interview. Ways include: - calling on the phone - writing a letter
	9. Discuss how to handle acceptance and rejection.	Ways to handle acceptance or rejection include:

Acceptance	**Rejection**
- decide if you really want this job - verbally accept the job - write a letter of acceptance - find out when you start work	- don't take it personally (it's your skills they're rejecting, not you) - think about any positive things they said about you - keep on looking for another job - thank them for interviewing you - ask if they will keep your application on file

If you decide ***not*** to take the job, write a letter thanking the employer for his/her time and saying why you will not be taking the job.

Discuss.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
iii) identify specific behaviours which help people keep a job	10. List appropriate behaviours which will help them to keep a job.	Prepare several sets of cards with inappropriate work behaviours on them. Divide the class into small groups. Have one student act out the inappropriate behaviours. The group has to decide what the corresponding appropriate behaviours would be.

Inappropriate	Appropriate
- arriving at work late	- always being on time
- leaving early (skipping out)	- staying at work as long as you should
- staying away from work without a good reason	- calling in first thing in the morning if you are ill
- calling your friends to chat to them	- doing what you're paid to do, during working hours - calling your friends at your lunch break
- dressing in your scruffy old jeans and T-shirt (if you're a receptionist)	- wearing appropriate clothes (this will vary depending on your job)
- constantly making mistakes	- asking someone to explain anything you don't understand
- being rude, if someone corrects you	- learning to accept criticism as a way of improving what you do
- walking out of the job	- giving enough notice (usually two weeks)
- yelling at people	- being a good listener, giving your opinion in a calm non-threatening manner

Discuss with the class.

SAMPLE RESUME OUTLINE

ME73

Personal Information: Name: _____(Full name)

Mailing Address: _____

_____ (include Postal Code)

Telephone: _____

Education History: _____

_____

_____

_____

(Start from the most recent. Include the schools you have attended, and any subjects which relate directly to the job for which you are applying.)

Work Experience: _____

_____

_____

_____

(Start from the most recent. Include part-time, summer work and volunteer work.)

Hobbies and Interests: _____

_____

_____

_____

(Include any which relate to the job, plus any which might be useful e.g., First Aid)

References: _____ _____

_____ _____

_____ _____

(Include the names of 2 or 3 people who know you well and ***whose permission you have*** e.g., a teacher.)

LETTER OF APPLICATION

ME74

Choose one of the newspaper ads and write a letter of application.

RECEPTIONIST
Required immediately. Must be bilingual and have pleasant telephone manner. Typing desirable.

STORE CLERK required immediately for Bay Northern Store. Must be highly motivated and reliable. Able to work Saturdays.

SEWING MACHINE OPERATORS for Parka Company. Must be experienced. Must be able to work flexible hours.

APPRENTICE CARPENTER
On-the-job training provided. Some courses will be taken at Arctic College in Fort Smith. Good starting pay.

NEED MONEY NOW?
NO EXPERIENCE NECESSARY
Contact
Funny Business
Box 000
Edmonton

INTERPRETER/TRANSLATOR
for new hospital. Must be bilingual (Inuktitut and English). Able to translate medical terms. Must have good people skills.

SAMPLE LETTER

Box 1240
Inuvik,
N.W.T. X0E 0T0

Manager
Bay Northern Store
Inuvik, N.W.T.
X0E 0T0

March 23, 1988

Dear Sir/Madam,
I wish to apply for the position of store clerk, advertised in this week's Inuvik Drum.

I have completed Grade 10 at Samuel Hearne Secondary School. I have also worked part-time filling shelves in your store on Saturdays.

I am enclosing my resume which will give you further details of my background.

I look forward to hearing from you.

Yours truly,

J. North

SAMPLE APPLICATION FORM

ME75

General Information — Complete all blanks. Use CAPITAL LETTERS

Always read instructions carefully.

Name in full — Last — First — Social Insurance Number

Leave this blank, if you don't have one. You will have to get one, if you are offered a job. You can apply for a S.I.N. by filling out an application form at the Post Office.

Address — City

Province — Postal Code — Phone

Position you are applying for (Title)

Be sure you write down the correct title.

Education

Names and addresses of schools attended — Dates of attendance — Type of Diploma

Start with your most recent school first.

If you do not have a diploma, write down which grade you have completed.

Employment

Dates — Name and Address of Employer — Job Title and Duties — Rate of Pay — Reason for Leaving

This can be per hour, day, week or year.

Start with the most recent first. List summer, volunteer or part-time jobs if you have not had any other jobs.

Which languages do you speak? _____

Additional interests/ hobbies _____

You should be able to carry on a short conversation.

References

References should be people who know you well, but not a close relative e.g., a teacher or former employer. You should ask them before you put their names down.

Name — Title — Address — Phone

Signature _____

SAMPLE INTERVIEW QUESTIONS

ME76

1. Tell me a little bit about yourself.
2. What were your grades like at school?
3. Do you have any experience with work like this?
4. Why do you want this job?
5. What kinds of things do you do in your spare time?
6. Why do you think I should hire ***you*** for this job?
7. If you were offered the job, when could you start work?
8. What was your favourite subject at school? Why?
9. Would you be prepared to take more training for this job?
10. Do you have any questions you want to ask?

Thank you for coming. We will be able to let you know in about a week.

MENTAL AND EMOTIONAL WELL-BEING

GRADE: 9 LESSON: 3 THEME: LIFESTYLE

CONCEPT: POSITIVE LIFESTYLE PRACTICES PROMOTE HEALTH

PREPARATION:
1. Prepare a class set of Lifestyle Quiz worksheets (Activity Sheet ME77)
2. Prepare a class set of Improving My Lifestyle worksheets (Activity Sheets ME78A and 78B)

VOCABULARY: lifestyle, assess

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the components of a personal lifestyle	Students: 1. Define the term 'lifestyle'	Background Information: Page — Lifestyle is an individual's way of life. It includes many different categories: - mental and emotional well-being - safety - nutrition - dental health - fitness - leisure - hygiene - drug use - social well-being

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		It reflects an individual's knowledge, attitudes and health behaviours. Health behaviours can be either positive (health-enhancing) or negative (health-compromising).
		Discuss.
	2. Give specific examples of knowledge, attitudes and behaviours that reflect positive mental and emotional well-being.	Some examples of a positive mental and emotional well-being include:

Knowledge	Attitudes	Behaviours
- knows personal strengths and weaknesses - knows decision-making skills - knows assertiveness skills	- feels good about him/herself - respects self and others	- communicates effectively - uses appropriate coping skills

ii) assess the components of their own mental and emotional lifestyle	3. Complete the Lifestyle Quiz.	Refer to Activity Sheet ME77. Have students complete the inventory to assess their own mental-emotional lifestyle.
iii) design a personal program to promote or maintain a healthy mental and emotional lifestyle	4. Design a personal program to promote or maintain a healthy mental-emotional lifestyle.	Refer to Activity Sheet ME78A. Have students select one aspect of their mental-emotional lifestyle (from Activity Sheet ME77) which they want to improve. It should be one of the statements to which they answered 'Never' or 'Some of the time' on Activity Sheet ME77. Then they should decide on their goal and devise a strategy to work on it. Teachers should work individually with students to ensure that goals are specific, measurable and realistic.

	5. Practise their personal programs for a given time period.	Refer to Activity Sheet ME78B. Have students record their own progress on a daily basis for a fixed length of time.
iv) evaluate the effectiveness of the program	6. Describe the degree of success of their program.	Refer to Activity Sheet ME78B. Have students refer to the evaluation section of their program. These personal programs can be continued over an extended length of time. Goals can be altered as necessary.

LIFESTYLE QUIZ

ME77

Decide if the following statements are true for you: most of the time, some of the time or never.

Put a cross in the appropriate box.

	Most of the time	Some of the time	Never
1. I feel good about myself.			
2. I know my own strengths and weaknesses.			
3. I respect myself.			
4. I can make responsible decisions easily.			
5. I enjoy new experiences.			
6. I am assertive.			
7. I have realistic plans for my life.			
8. I know who to ask if I need help.			
9. I get satisfaction when I work hard at things.			
10. I am happy with my life.			
11. I make friends easily.			

	Most of the time	Some of the time	Never
12. I respect my elders, family and friends.			
13. I am kind to others.			
14. I can receive and give constructive criticism.			
15. I trust others and hope they trust me.			
16. I like being by myself.			
17. I feel comfortable talking and listening to other people.			
18. I get along well with my parents.			
19. I belong to a group.			
20. I can receive and give honest compliments.			

Scoring: When you have finished answering all the questions, add up your score as follows:

Most of the time _____ x 3 points =

Some of the time _____ x 2 points =

Never _____ x 1 point = _____

Total

IMPROVING MY LIFESTYLE

ME78A

Select one thing that you can do personally to improve your own mental and emotional lifestyle. Develop an action plan to achieve your goal.

MY GOAL:

WHY I CHOSE THIS GOAL:

STEPS TO REACH MY GOAL:

(What I have to do to reach my goal)

1

2

3

4

5

SUPPORT I NEED TO REACH MY GOAL

61

ME78B

PROGRESS:

(Chart your daily progress)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
WEEK 1							
WEEK 2							
WEEK 3							
WEEK 4							

HOW DID I DO?

(Summarize your progress and assess how well you did.)

GRADE 9

TEACHER BACKGROUND INFORMATION

MENTAL AND EMOTIONAL WELL-BEING

CAREER AND LIFE PREPARATION

The terms 'career' and 'job' are often used synonymously.

In the School Health Program, the following definitions are used:

career: a chosen course of action through life. It includes training, the different jobs a person holds, hobbies, even retirement.

job: a position within an organization. This position has particular tasks and responsibilities assigned to it.

Grade 9 is a watershed for many students in the Northwest Territories. It is the year when they decide whether to continue their education to High School or to leave school. The more education a person has, however, generally the more opportunities are available to that person. Nowadays, most people will have a number of different jobs and will be re-trained a number of times between the time they leave school and the time they retire.

Job search skills which students learn now, as well as an ability to identify their own strengths and interests will probably be used many times over. They may be used to determine one's career, to search for jobs, to pursue volunteer work or to make effective use of leisure time.

Making Decisions for the Future

Grade 9 students have first to decide whether to continue their education, or to leave school and look for a job. They should be encouraged to use the decision-making process.

- What is the problem?
- What are the alternatives?
- What are the consequences of each alternative?
- What is important to the person?
- Make a decision.
- Evaluate the decision at a later date.

Leaving School

Pros	Cons
- stay in community with family	- low skill level - lower earning potential - fewer job opportunities

Continuing Education

Pros	Cons
- greater job opportunities - more skills - higher earning potential	- may have to leave community - a few years' delay before a person starts earning money

Assessing one's likes and dislikes, one's interests, abilities and attitudes is an important first step in making choices related to one's career and life pattern. E.g., a person who likes helping people may be bored if s/he has to work a piece of machinery all day.

Matching these interests and abilities to particular jobs may indicate what kind of job the person should look for.

Active Job Searching

Finding, getting and keeping a job that is right for the individual takes time, careful planning and patience. Looking for a job requires energy. It involves trying to make employers notice the special skills which that person has. The success of a job search often depends on how much effort is put into it.

Finding Employers

a) **Personal contacts** - telling other people exactly what kind of job they are looking for and asking them if they know of any jobs that are open and or will be opening soon. Some of the people who may be helpful in finding job openings are friends, relatives, or neighbours. This method of looking for a job may be slow but is often effective.

ME43

b) **Media** - Newspapers, employment bulletins as well as radio and television stations advertise job openings. In newspapers, job openings are listed in the classified section and in larger city newspapers such as the Edmonton Journal they have a section on Career Opportunities. Some employers such as the Territorial and Federal Governments advertise through their employment bulletins which are put up in all the Departments. Some schools also get copies of employment bulletins. It is important for people to read or listen to the advertisements very carefully to make sure the job really interests them and make sure they have the skills necessary for that job.

c) **How to identify employers** - Sometimes job openings can be found by contacting employers even if there isn't a position advertised or even if they don't have a position open at that time.

It is a waste of time for people to contact employers who do not need their special skills and abilities.

A person with little experience should contact employers who offer on-the-job training. A lot of employers, especially for students, will hire because they think they are capable of learning new skills and are willing to try all kinds of things to obtain skills. An important thing to remember is that IF A JOB IS WORTH DOING, IT IS WORTH DOING WELL. Sometimes, it is necessary for people to do work that they really don't enjoy.

Sometimes employers can be found in the Yellow Pages of the telephone book. Another good source is what is known as a Business Directory. These books supply the name, address and other useful information about a company and what its business is all about. Business Directories can usually be found in public libraries. Employers can be contacted by mail, by telephone or in person by going to their office. Actually seeing the employer in person is usually the best way.

The person to get in touch with is the person who makes the decisions about hiring.

If seeing the employer in person is not possible, it is acceptable to write them a letter. In a day or two when they will have received the letter, it can be followed up with a telephone call. They might ask about the kind of work the person is looking for and why they want to work for that company.

Canada Employment Centres

1. Employment Centres provide a service which is free of charge to both the employer and the job seeker. It serves both employed and unemployed people.

2. They have lists of employers with job openings and they may provide:

   - information about job openings
   - assistance in getting interviews or making contact with employers
   - testing (typing test, education level test)
   - help in preparing letters, application forms
   - information about training and how to get financial assistance to take courses
   - information about jobs in other communities and how to get financial assistance if it is required.

Canada Employment Centres are located in the following communities (June 1988):

- Inuvik
- Fort Simpson
- Fort Smith
- Hay River
- Yellowknife
- Rankin Inlet
- Iqaluit

Outreach Projects (funded by Canada Employment) are located in:

- Igloolik
- Pond Inlet
- Pangnirtung
- Eskimo Point
- Fort Resolution
- Fort Norman
- Rae-Edzo
- Tree of Peace, Yellowknife

Writing a Resumé

A resume is a record with all the information that will interest an employer.

Personnel managers often get a lot of applications and by looking over a written record they get a better idea of a person's skills than from the basic information given on the average application form. The resumé should be short, easy to read and written in such a way that it shows immediately the person's special skills and abilities.

1. **Personal information** is put on the top of the page and includes the person's full name, address and a telephone number where s/he can be reached or where a message can be left.

2. **Educational history** is very often the most important part of the list. This section should include the names of the schools the person attended, the type of programmes, degree or certificate s/he received when s/he finished. Employment training courses and workshops should also be listed — these show that the person has "kept in touch" and is always interested in learning more.

3. **Work experience or employment records** are a necessary part of the list. Dates should be given along with the names of past employers, their addresses and a description of the work duties. Job descriptions should be as short as possible but should include the things which the person did in that job, skills needed to do the job, and responsibilities. It is also good to let an employer know about any promotions in past jobs. Part-time, summer or volunteer work should also be included.

4. **Leisure time activities** provide some information about the person's personality. Involvement in activities such as baseball, hockey or other sports shows responsibility and an involvement in the community. Certificates received from special skill training (First Aid, Life Skills or Coaching) should be listed.

5. **References** don't have to be shown on the list but they should be available if the employer asks for them. References should be chosen carefully and should not include family members or relatives. Many employers won't accept references if they are from family members.

BEFORE making a list of references, it is important for the person to ask the people s/he has chosen if it is okay to use their name and if they will give him/her a good recommendation for the job s/he is applying for.

Some important points about writing a resume:

- It should be typed neatly on plain white paper.
- There should be no mistakes in spelling, punctuation or typing.
- It should be simple and short. (One or two pages at the most.)
- It should include ***all*** the person's special skills.
- It should be truthful. Employers may check out the information.
- Language should be clear and simple.
- The writer should keep a copy of his/her resume for reference.

Writing a Letter

The following are the usual ways of writing letters asking about jobs, covering letters and letters of application.

- The letter should be short and to the point (one page) and should basically tell the employer what the applicant has to offer. A resume should be included.

- The first sentence should be written so that right away it gets the employer's attention. The letter must make the employer want to read the resume and want to meet the person who wrote it.

- Telling an employer how one's skills are important to the particular job s/he is applying for will encourage the employer to learn more about the person.

- At the end of the letter, a telephone number should be included where the employer can contact the applicant or at least leave a message.

- The letter should be typed and checked carefully for spelling and punctuation mistakes.

- The letter should always be an original - not a xerox copy.

- A resume should ***always*** have a covering letter.

ME45

Answering an Advertisement

The following things should be kept in mind when answering an advertisement.

- The person should be sure they are interested in the job and have the special skills necessary to do it.

- The job should be applied for in the way the advertisement asks. If the employer is in a hurry to fill a job position the ad may request that applicants simply telephone their office and give their list of skills over the phone. Employers advertising a summer position often want an application form completed. If no special way of applying is advertised, then the person can send a letter with his/her employment record.

- The job position, the date it was advertised and the place where the advertisement appeared should be included in the letter. Some positions have what they call a file, competition or reference number and this should be included in the letter also.

- The person applying for the job should keep a copy of all his/her applications.

Completing Application Forms

When people contact an employer they will probably be asked to fill out an application form. They must know how to fill the form out properly to be considered for the job. If they are careful in filling out the form the employer will think they are careful when doing their work. A neat and carefully completed form will tell the employer good things about the applicant. Not everyone can or does write or print with perfect form and in this case neatness really applies. The important thing is to fill it out as carefully as possible.

Each company or business will have its own type of application form and they have a certain way they want them filled out. The following points will be helpful in filling out most application forms.

- If the form does not have to be completed in the office, it can be taken home and filled out carefully and neatly.

- If two copies of the form can be obtained, one should be filled out in pencil and kept for reference. The other should be typed or printed in ink and given to the employer.

- Some forms say print, some say write and some say to type the information. The instructions should be followed carefully so that no blank spaces are left. If a question does not apply the person can fill in the blank with the abbreviation N/A. This means "not applicable".

- The name should be written out in the order asked for e.g., last name, first name, middle initial

  North, Jim L.

- An address and telephone number should be included so that the employer can get in touch with the applicant, if necessary.

- It is important to state exactly what position the applicant is interested in.

- Work experience and education should start with the most recent and work back from there.

- Any languages which the applicant has a working knowledge of should be included (in the N.W.T., particularly if it is a native language).

- All questions should be answered honestly.

- If it asks for references, their names and addresses should be included. People listed for references should always have given their permission first.

- The form should be checked over for accuracy before handing it in.

- It should be sent off immediately.

Attending an Interview

The interview is probably the most important part of the job search. Many people feel very nervous about job interviews.

Everyone at some point in time has been interviewed so employers know how the person feels and will try and make him/her feel less nervous.

Employers hire someone because they like the person and they need that person's special skills to get the jobs in their company done. An interview provides the applicant with information about the company and is also to see if s/he can do the job. Both the applicant and the interviewer will be asking the same question "Do I really want to work with this person?"

Preparing for an Interview

There are several ways to help get over nervousness before an interview and listed below are a few examples that may help:

- Try and get plenty of sleep the night before the interview.
- Clothes should be neat and clean because one's appearance may be important. For SOME job interviews it is okay to wear jeans or cords but OTHER jobs may require dress pants or a skirt.
- It is important to be on time. Have the correct time and place written down.
- Find out, and remember, the name of the person who is conducting the interview.
- Make sure a copy of the resume is available.

Going for an Interview

When it is time for the interview, take a deep breath and appear as confident as possible.

- Eye contact is very important. This means looking directly at the interviewer.
- Be sure to speak loudly and clearly enough for the interviewer to hear.
- It is alright to ask the interviewer to repeat a question. Do it politely.
- Answer questions honestly.
- Try not to answer questions with 'yes' or 'no'. Expand on the answers a little.
- It may be necessary to fill out an application form or to have a medical.

- When the interview is over, ask when the interviewer will make a decision and how the applicant will know about the decision.
- Say a polite 'Goodbye' when the interview is over. Thank the interviewer for his/her time.

Questions Interviewers May Ask

The following are some common questions which an interviewer may ask.

1. Tell me (us) about yourself.
2. Why do you want to work for this company?
3. What do you know about the job(s) that are open?
4. What other jobs have you had?
5. Why did you leave your other job?
6. What courses did you like best in school?
7. What courses didn't you like in school?
8. Why did you choose to apply for a (secretary's, waitress', mechanic's) job?
9. What do you know about our company?
10. What special training have you had that is necessary for this job?
11. What are your hobbies?
12. What special things do you think a person does that helps them get promotions in a job?
13. Do you like to work with others or do you prefer to work by yourself?
14. Can you work with little or no supervision?
15. Do you prefer to work indoors or do you like outdoor work better?
16. Did you get along well with your other employers and co-workers (teachers, fellow students)?
17. Do you think your past employers/teachers would give you a good reference?
18. What interests you most about our company?
19. What parts of the job do you think you would find most interesting?
20. What parts of the job do you think would be boring?
21. What other kinds of jobs would you like to do?
22. Would you like regular hours or do you mind doing shift work?
23. What do you do really well?
24. What don't you do very well?
25. If you had your choice of any job in the company which one would you want?
26. Do you read very much?
27. What kind of books do you prefer to read?

28. Do you like to travel?
29. Everybody has good and bad habits. What bad habits in other people really bug you? In yourself?
30. Which jobs have you had that you enjoyed the most?
31. Which jobs did you enjoy the least?
32. Did you have any school teacher that you really liked? Why?
33. Did you have any school teacher that you really disliked? Why?
34. Would you take further training if it was required for this job?
35. What salary are you looking for?
36. Would you be willing to move to another community if the job required you to do so?
37. If you are corrected for a mistake you made do you get angry and frustrated or do you accept your mistake as a learning experience?
38. If you could be any other person in the world, who would you like to be?

Follow-up to the Interview

If the applicant does not hear about the job soon after the interview, it is acceptable for him/her to call or write and ask if a decision has been made.

If the job is offered to the person, s/he should decide if s/he really wants the job, should accept it verbally and then write a letter of acceptance.

If the applicant is rejected for the job, although s/he will feel disappointed, s/he should keep applying for other jobs.

Keeping a Job

Having found a job, there are appropriate behaviours which will help the person to keep the job.

Appropriate behaviours include:

- always being on time; calling if you will be late for any reason;
- staying at work as long as you should e.g., not leaving work early;
- calling in first thing in the morning, if you are ill and not able to go to work;
- doing the work you're paid to do, during working hours;
- making any personal calls during coffee breaks or lunch hours;
- wearing appropriate clothes (this will vary depending on your job);
- not being afraid to ask someone, if you don't understand what you're to do;
- learning to deal with criticism as a way of improving what you do;
- giving enough notice, if you plan to leave the job.

Adapted from: 'Jobs: An Answer Book' by Manpower Development Division, GNWT Economic Development and Tourism.

GRADE 9

GROWTH AND DEVELOPMENT

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 1 THEME: BODY SYSTEMS

CONCEPT: THE IMMUNE SYSTEM HELPS PROTECT THE BODY FROM DISEASE

PREPARATION: 1. Prepare overhead transparencies of Activity Sheets GD84, 85, and 86

VOCABULARY: germ, virus, defence, organism, immune, immunization

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: Page GD39 to GD40
i) describe how germs enter the body	1. Define the term 'germ'.	Use a dictionary and general discussion to define it. A germ is an organism that may cause disease.
	2. Describe how germs enter the body and multiply.	Refer to Activity Sheet GD84. Brainstorm how germs enter the body. Germs enter the body - through breaks in the skin e.g., cuts - through body openings e.g., mouth, nose Use the overhead transparency to explain how a virus (one type of germ) multiplies.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) describe the body's first two lines of defence	3. Give examples of the body's outer defences and how they work to protect the body from disease.	Record information using an experience chart as illustrated:

Outer Defences	Function
- skin	- physical barrier to keep germs out
- mucous membranes	- physical barrier to keep germs out
- hair (cilia) in the respiratory system	- fine hairs that work with mucus to trap germs and move them to the throat
- body secretions (tears, saliva, gastric juices, mucus)	- tears wash germs out of the eyes - other chemicals kill germs - mucus traps germs
- reflexes (coughing, sneezing, blinking)	- rids the body of germs - wash germs away

iii) describe how the immune system helps protect the body from disease	4. Describe how white blood cells protect the body from disease.	Refer to Activity Sheet GD85. The immune system is the basic defence network. A number of different cells move within the blood and lymph fluids to fight disease agents. Use the overhead transparency to explain how special white blood cells identify, surround and destroy the germs.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	5. Explain the role of T-cells and B-cells in fighting disease.	Refer to Activity Sheet GD86. When the macrophage cannot destroy the germs, the immune system produces special cells to help fight disease. ***B-cells*** are special cells that produce antibodies. The antibodies enter the blood stream and fight specific infections. ***Helper T-cells*** are special white blood cells that identify the organisms. They alert and co-ordinate other cells to fight the disease. ***Killer T-cells*** are special T-cells that kill infected host cells and stop the infection from spreading. ***Suppressor T-cells*** signal the other special cells to slow down reproduction once the disease has gone.
	6. Discuss the importance of the immune system.	Prior to the class, invite the community health nurse or doctor to talk about immunization. The immune system is important in: - fighting disease - responding to allergies
	7. Explain how immunization helps protect the body from disease.	Use a dictionary to define immunization (and vaccination). Immunization means giving a person protection or resistance to a disease. It is usually done by injection, although the polio vaccine now is generally administered orally.

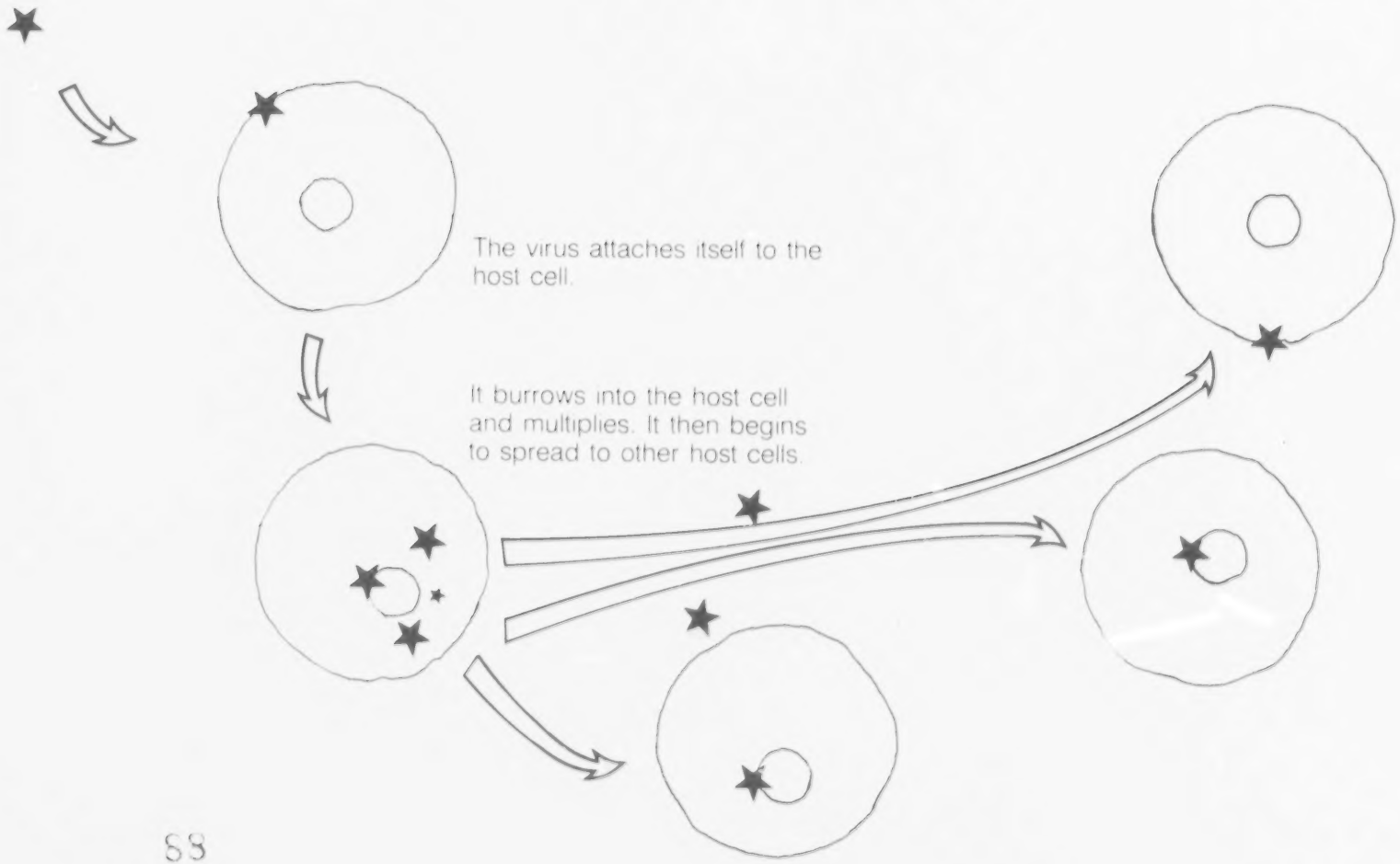
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Have students brainstorm types of immunization they may have had: - diptheria - tetanus - whooping cough - polio - measles/mumps/rubella - 'flu People who travel to foreign countries often need immunization against diseases which may be common in that country e.g., cholera. Vaccine contains a very small amount of the germ which causes the disease. This then causes T-cells and B-cells to form, which remain in the body to fight the disease. Because only a small amount of the germ is in the vaccine, it is not enough to make a person sick.
iv) describe common problem conditions related to the immune system	8. Brainstorm common problem conditions of the immune system.	Common problem conditions of the immune system include: - immune-deficiency diseases (the body does not produce its own defences such as antibodies). (The best known of these is AIDS.) (AIDS is covered in the Family Life Section of Grade 9.) - abnormal development of the immune system - allergies
	9. Select a project to undertake related to the immune system.	Students can work individually or in pairs. Have them select a project from one of the following: - How the immune system protects the body from disease - The importance of immunization - Germs and the Body - Medicine and Disease e.g., penicillin, Pasteur, etc.

HOW A VIRUS SPREADS INSIDE THE BODY

GD84

The virus enters the body (through a break in the skin or a body opening).

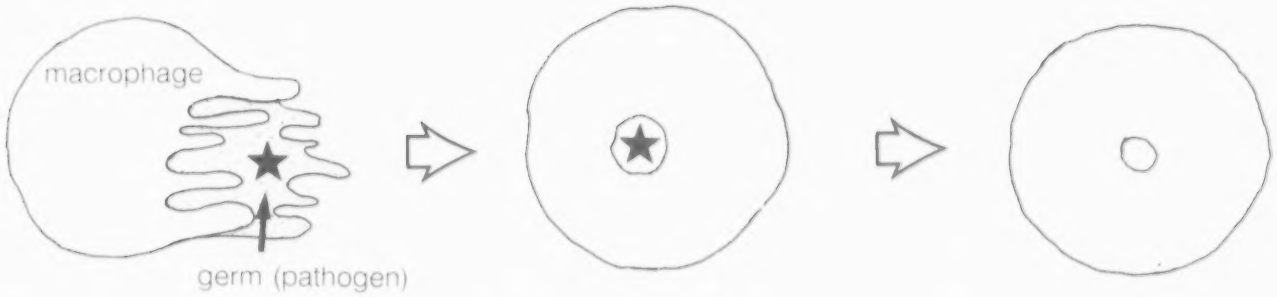
virus


The virus attaches itself to the host cell.
It burrows into the host cell and multiplies. It then begins to spread to other host cells.

CELL DEFENCES FIGHT THE GERMS

GD85

1. Macrophage finds the germ.
2. Macrophage surrounds the germ.
3. Macrophage destroys the germ.

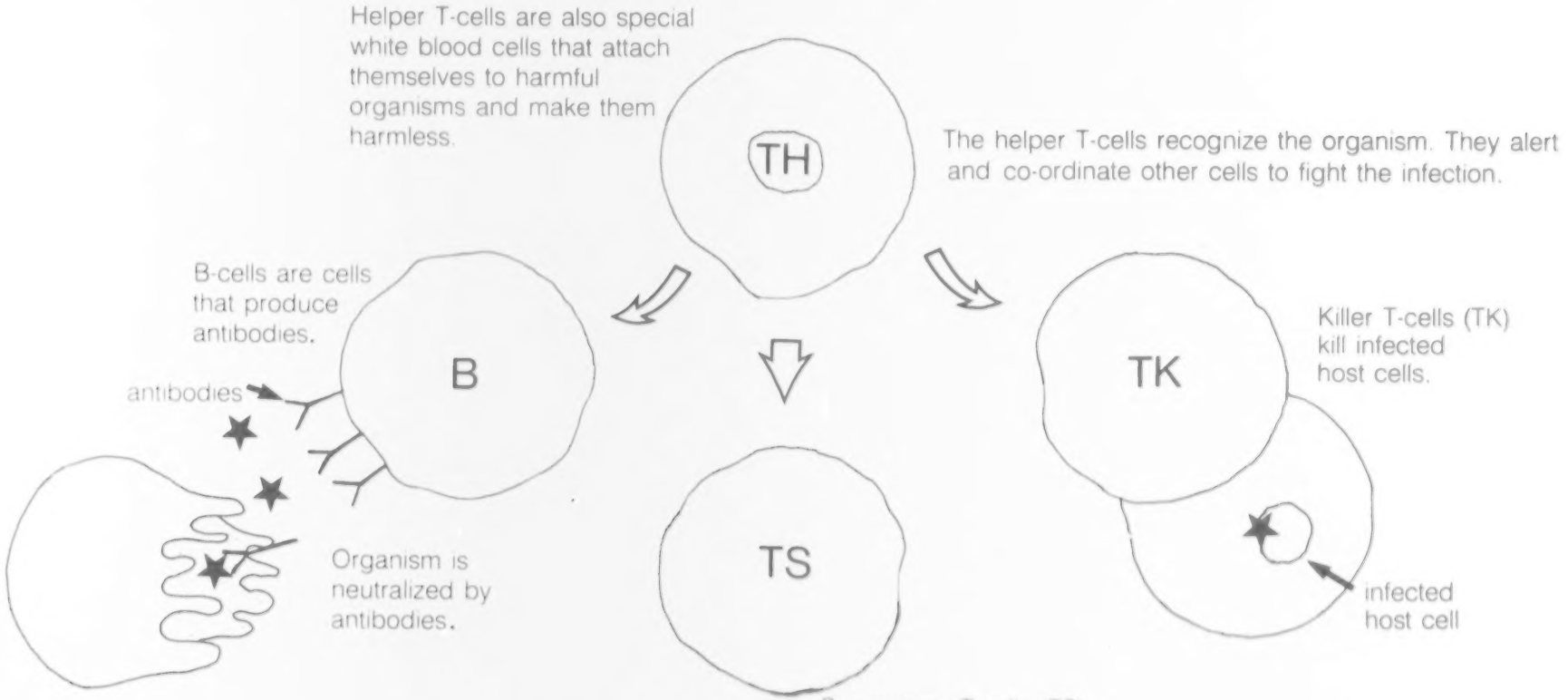


Special white blood cells (macrophage) find the germ (pathogen), surround it and destroy it.

Inflammation, fever, aches and pains are signs that the body is producing special white blood cells to fight disease.

HOW THE IMMUNE SYSTEM HELPS PROTECT THE BODY FROM DISEASE GD86

When an infection spreads too fast for the white blood cells to control it, helper T-cells join the battle.


Helper T-cells are also special white blood cells that attach themselves to harmful organisms and make them harmless.
TH
The helper T-cells recognize the organism. They alert and co-ordinate other cells to fight the infection.
B-cells are cells that produce antibodies.
B
antibodies
TK
Killer T-cells (TK) kill infected host cells.
Organism is neutralized by antibodies.
TS
infected host cell

Macrophage destroys and cleans up the debris.

Suppressor T-cells (TS) signal the B-cells and T-cells to slow down reproduction once the disease has gone.

Some B-cells and Killer T-cells remain in the body. These are what give people immunity from disease.

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 2 THEME: BODY SYSTEMS

CONCEPT: THE BODY SYSTEMS WORK TOGETHER TO PROMOTE HEALTH

PREPARATION:
1. Prepare one set of cards with the functions of the body systems and another set with the names of each body system
2. Prepare a class set of Crisis worksheets (Activity Sheet GD87)

VOCABULARY: control, regulation, transport, supply

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) classify the body systems according to function	Students: 1. Make a chart of the body systems classified according to function	Background Information: Page GD41 Write the functions of the body systems on one card. Write the names of each of the body systems on another. Have the students decide which body system performs which function.

Classification of Body System

Function	Body System
control and regulation	nervous system
	endocrine system

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		transport and supply: circulatory system; respiratory system; digestive system; excretory system support, movement and protection: muscular system; skeletal system; skin system; immune system reproduction: reproductive systems
ii) explain the inter-relationships of the body systems	2 Choose a crisis scenario and describe how the body systems interrelate as they meet the crisis.	Refer to Activity Sheet GD87. The crisis scenario is 'Chased by a Bear'. Tell students what the crisis is. Ask them to go through each body system and describe how it reacts in this crisis. Teachers can prepare other scenarios. Have students select their own crisis and write a story about it, indicating the reactions of each body system. E.g., shaking and breathless....
	3 In pairs, participate in an active physical activity and note changes in the body systems.	Have one student from each pair run on the spot for three minutes. His/her partner has to observe body changes. Then the other person runs on the spot. Discuss the body systems involved.

CRISIS!

GD87

Situation: Chased by a bear

Body Systems

nervous system:
- senses perceive bear and send signal to brain that the bear is a danger
- messages are sent from the brain to other body systems

endocrine system:
- adrenalin output increases
- heart rate increases
- awareness level is heightened

circulatory system:
- heart rate increases
- blood flow increases to muscles for energy output

respiratory system:
- breathing rate increases
- more oxygen delivered to muscles
- wastes removed more quickly

digestive system:
- digestion stops as blood is redirected to essential muscles

excretory system:
- wastes from active muscles are removed quickly and stored

skin system:
- skin sweats to remove heat
- skin gets paler

muscular system:
- uses energy to escape from bear

skeletal system:
- supports body in escaping from bear

reproductive system:
- not directly involved

immune system:
- not directly involved

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 3 THEME: DISEASE PREVENTION

CONCEPT: NON-COMMUNICABLE DISEASES MAY BE PREVENTED OR REDUCED BY POSITIVE LIFESTYLE BEHAVIOURS

PREPARATION:
1. Addresses for various health agencies which can provide information on non-communicable diseases
2. Booklets or pamphlets about non-communicable diseases

VOCABULARY: communicable, non-communicable

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify common non-communicable diseases	Students: 1. Differentiate between communicable and non-communicable diseases	Background Information: Page GD42 to GD54 Ask students what the difference is between a disease such as cancer (non-communicable) and a disease such as the common cold (communicable). **Communicable** - can be passed from one person to another - caused by a living organism e.g., virus - usually short-term - can usually be treated and cured **Non-communicable** - cannot be passed from one person to another - not caused by a living organism - usually long-term - may never be cured

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Lifestyle and immediate physical environment are major contributors to cause and prevention of non-communicable diseases.
	2. List examples of common non-communicable diseases.	Common non-communicable diseases include: - cardiovascular disease e.g., hypertension, atherosclerosis, heart attack, heart failure, stroke - cancers e.g., lung, skin, oral, cervical, leukemia (of the blood) - arthritis - cirrhosis of the liver - emphysema - diabetes
ii) identify the nature and causes of common non-communicable diseases	3. Select a non-communicable disease and research the causes, nature and preventive lifestyle behaviours.	Have students write to various health agencies e.g., Canadian Cancer Society or go to the nursing station and/or library for information on non-communicable diseases.
iii) identify lifestyle behaviours which prevent non-communicable diseases	4. Present a brief report to the class.	Lifestyle behaviours which might prevent non-communicable diseases include: - eating a well-balanced diet - exercising regularly - not smoking - having regular medical check-ups

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 4 THEME: LIFESTYLE

CONCEPT: POSITIVE LIFESTYLE PRACTICES PROMOTE HEALTH

PREPARATION:
1. Prepare a class set of Am I At Risk? worksheets (Activity Sheet GD88)
2. Prepare a class set of Growing Up Healthy worksheets (Activity Sheet GD89)

VOCABULARY: risk factors

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify positive lifestyle practices that promote healthy growth and development	Students: 1. List risk factors related to lifestyle	Background Information: Page GD42 to GD54 Risk factors are conditions or habits that can increase the chances of disease. Risk factors can be classified as follows:

Controllable	Modifiable	Uncontrollable
- smoking - lack of exercise - overweight (usually) - underweight	- blood pressure - stress/tension - cholesterol - diabetes	- sex - heredity - age

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	2. Complete the Am I at Risk? worksheet.	Refer to Activity Sheet GD88. Have students complete the worksheet to find out if they are at risk. If students answered YES to the following questions, their lifestyle may be putting them at risk. Questions 1, 2, 4, 5, 6, 9, 10. If they answered NO to the other questions, their lifestyle may be putting them at risk. Questions 3, 7, 8.
	3 Select one lifestyle practice from the Am I At Risk? worksheet which puts them at risk and identify a positive lifestyle practice for it.	Refer to Activity Sheet GD88. Have students select one positive lifestyle practice which will promote healthy growth and development. E.g., if the lifestyle practice that puts him/her at risk is not exercising regularly, then the positive lifestyle practice is to exercise three times a week.
ii) design a personal program to promote healthy growth and development	4 Design a personal program to promote healthy growth and development.	Refer to Activity Sheet GD89. Have each student complete the following: - My Goal - Why I Want to Reach This Goal - What I Have to Do to Reach This Goal

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	5. Practise his/her personal program for a given time period.	Refer to Activity Sheet GD89. Have students decide on a time period for their personal program and using the chart 'How I Am Doing?', keep a daily record of their progress during that time.
iii) evaluate the effectiveness of the program	6. Describe the degree of success of his/her program.	Refer to Activity Sheet GD89. Have students evaluate how successful they were in working towards their goal and record the evaluation in the section 'How Did I Do?' Successes can be shared among friends, in small groups, or as a class depending upon the goals set and whether or not students are comfortable with such sharing.

AM I AT RISK?

GD88

Read each item. Decide how this statement applies to you: YES, A LITTLE, or NO. Put an X in the appropriate box.

	YES	A LITTLE	NO
1. I smoke cigarettes, chew chewing tobacco or use snuff.			
2. I am overweight.			
3. I exercise regularly.			
4. I drink alcohol or use other drugs.			
5. I worry about things.			
6. I often eat junk food.			
7. I usually get enough sleep.			
8. I have regular medical check-ups.			
9. There's lots of garbage around my house/school.			
10. I eats lots of fatty foods.			

GROWING UP HEALTHY

GD89

Name: _____

My Goal: (Specific goal that I wish to work towards)

_____

_____

_____

Why I want to reach this goal:

_____

_____

_____

What I have to do to reach my goal:

Things I have to do:	Supports I need to help me:

How I am doing:

Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	
							Week 1
							Week 2
							Week 3
							Week 4

How did I do? (Summary of my daily comments; my successes in working towards my goal)

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 5 THEME: HEALTH CARE SYSTEM

CONCEPT: EACH PERSON IS RESPONSIBLE FOR APPROPRIATE USE OF THE HEALTH CARE SYSTEM

PREPARATION:
1. Prior to the class, invite a local health professional to discuss the health care system
2. Prepare a class set of Canadian and Territorial Health Facts Sheet (Activity Sheets GD90A - 90B Answer Sheet)

VOCABULARY: health care system, extended benefits, premium

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the health care system in the N.W.T.	Students: 1. Describe local health care services.	Background Information: Page – Prior to the class, invite a local health professional to discuss: - examples of local health care providers - professional and para-professional - health care facilities - health insurance - non-government health organizations - informal networks related to health * If appropriate for your particular community, and if resource people are available, discuss the role of traditional medicine in health care.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Divide the class into groups. Have each group make a list of local services under one of the following headings.

Health Care Providers	Facilities	Non-government Agencies	Informal Networks
- nurse - doctor - dentist - dental therapist - community health reps. - traditional medicine people	- nursing station - hospital - dental office	- St. John - Alcoholics Anonymous - Block Parents	- family - friends - elders

ii) illustrate the cost of health care in the N.W.T.	2. Compare and contrast the cost of health care to the individual in the N.W.T. compared to other provinces.	In the N.W.T. - no premium for basic medical coverage for anyone In Alberta - people have to pay a premium for basic medical coverage If a person is employed, they may pay a supplementary amount which gives them extended medical benefits. Native people who have to travel out of the community for medical services have their costs paid by the Federal Government. Non-native people may have to pay $100 return towards their air fare. If they are employed, this is paid by their employer.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	3. Graph health expenditures for the N.W.T. over the last 25 years.	Annual health expenditures in the N.W.T. every 5 years: 1960 - $ 3 m. 1965 - $ 5 m. 1970 - $11 m. 1975 - $30 m. 1980 - $62 m. Indicate on the graph what they expect the health care costs to be in 1990. Discuss the trend of the graph.
	4. Discuss the Canadian and Territorial Health Facts Sheet.	Refer to Activity Sheet GD90A. Have students work in small groups to complete the worksheet. Refer to Activity Sheet GD90B for answers. Discuss the facts with the class.
iii) describe responsible use of the health care system	5. Make a list of responsible ways to use the health care system.	Brainstorm responsible ways to use the health care system. Responsible ways include: - practising healthy lifestyle behaviours; - seeking medical advice promptly when ill; - keeping personal records of immunization; - following the medical advice which is given; - taking medications as prescribed; - completing the course of medication; - having regular medical and dental check-ups; - seeking early pre-natal care, if pregnant; - staying at home in bed when one has a cold or 'flu; - avoiding using the health care system if it is not necessary. Students may be able to present some of this information to parents in a workshop.
	6. Write a short essay on The Health Care System in the N.W.T.	Have students write an essay. It can include topics such as: - its history - problems peculiar to the N.W.T. e.g., language - costs associated with health care - responsible use of the system etc. - the role of traditional medicine

CANADIAN AND TERRITORIAL HEALTH FACTS

GD90A

Circle the correct answer.

1. The total cost of health care in Canada in 1985 was
   a) $500 m b) $1 billion c) over $30 billion

2. How much was it per person?
   a) $500 b) $1000 c) over $1000

3. Is the N.W.T. per person cost more or less than the national cost?
   a) more b) less

4. How much have health costs increased since 1960?
   a) 5 times b) 10 times c) 15 times

5. How much does it cost per patient per day for a hospital to function?
   a) $100 b) $200 c) $300

6. How much does it cost per patient per day for a nursing station to function?
   a) $300 b) $1000 c) $2000

7. How many doctors do you think there are in the N.W.T.?
   a) 200 b) 100 c) under 100

8. What's the ratio of people to doctors in the N.W.T.?
   a) 500 to 1 b) 750 to 1 c) 1000 to 1

9. Is this higher or lower than other parts of Canada?
   a) higher b) lower

10. How much does it cost a person for basic health care coverage in the N.W.T.?
    a) no cost b) $40 per month c) $100 per month

CANADIAN AND TERRITORIAL HEALTH FACTS

GD90B

(Teacher Answer Sheet)

1. The total cost of health care in Canada in 1985 was over $30 billion.
2. This works out to over $1000 per person.
3. The N.W.T. is higher than this. In 1985, it was approximately $1500 per person.
4. Health costs have increased 15 times since 1960.
5. It costs $300 per patient per day to operate a hospital.
6. It costs approximately $2000 per patient per day to operate a nursing station.
7. There are presently (1988) under 100 doctors in the N.W.T.
8. There are 1000 people to 1 doctor in the N.W.T.
9. This is higher than other parts of Canada. Ontario has the lowest ratio at approximately 500 to 1.
10. There are no medical premiums for basic health care for anyone in the N.W.T. Some people may pay a supplementary amount for extended benefits.

GROWTH AND DEVELOPMENT

GRADE: 9 LESSON: 6 THEME: HEALTH CAREERS

CONCEPT: THE HEALTH CARE SYSTEM OFFERS MANY OPPORTUNITIES FOR HEALTH CAREERS

PREPARATION:
1. A copy of 'Health Careers in the Northwest Territories' (available in all schools or from the Otto Schaefer Health Resource Centre, Box 1320, Yellowknife, N.W.T.)
2. Invite a number of health professionals to form a panel to discuss their jobs

VOCABULARY: opportunities

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: Page
i) identify health career opportunities in the N.W.T.	1. Make a list of the health career opportunities which they know exist in the N.W.T.	Refer to the publication 'Health Careers in the Northwest Territories' (published by the Department of Health and available in all schools). e.g., community health nurse, dental therapist etc.
	2. Research one or more health careers of interest.	Have each student choose one of the Health Careers from the publication and research the following areas: - educational requirements - length of training required - working conditions - job opportunities - salaries - duties and responsibilities of the job

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	3. Prepare a class book of Health Careers in the N.W.T.	Have each student prepare a section of the book using their research material.
	4. Find out about specific health jobs in the community or region.	Invite a panel of different health professionals to answer questions on their jobs. Have students prepare questions in advance.

GRADE 9

TEACHER BACKGROUND INFORMATION

GROWTH AND DEVELOPMENT

THE IMMUNE SYSTEM

Diseases are caused by organisms called germs or pathogens. They generally belong to five groups:

- bacteria: one-celled organisms which multiply by dividing in half. They can double every 30 minutes. Many bacteria do not cause diseases and, in fact, are useful to people e.g., bacteria which help make cheese or yogurt.
- viruses: a single unit of genetic material in a protein shell. They are the smallest pathogen and can be seen only by a special microscope. They live and multiply inside living cells. They use part of the cell they invade to multiply. The new viruses then attack other living cells. Common colds are caused by a virus.
- fungi: small plantlike organisms. They cause diseases such as Athlete's Foot.
- protists: one-celled organisms with specialized internal structure. They include different kinds of amoebae. Diseases caused by protists are more common in tropical countries.
- animal parasites: organisms that live by feeding on other animals. They often enter the body by infected food or water and live in the intestines e.g., worms.

Germs or pathogens can be passed on in a number of different ways

- through the air
- through infected food
- through infected water
- by touch
- by animals.

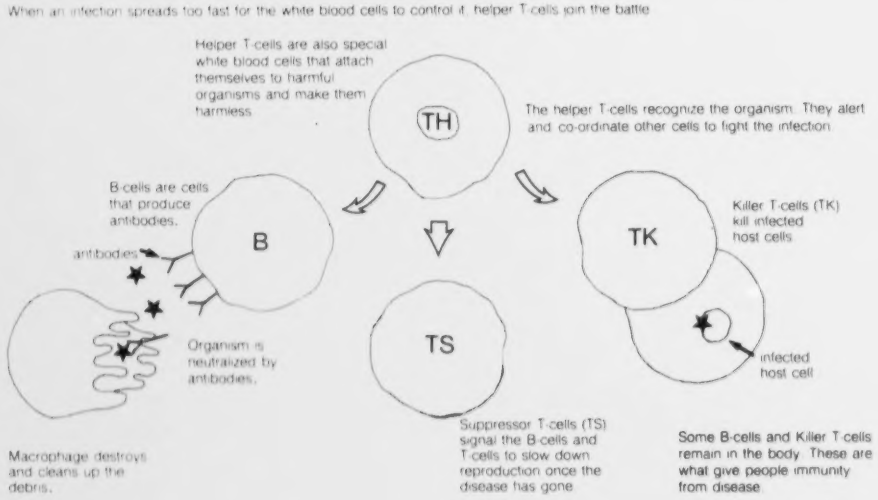
Germs enter the body either through breaks in the skin i.e., cuts or grazes or through body openings such as the mouth or nose.

The body has different lines of defence against disease.

a) its physical defences (which prevent germs entering the body)
- skin
- mucous membranes
- perspiration, tears, saliva

b) its cellular defences
- some cells identify the germ
- other special white blood cells surround it and destroy it

HOW THE IMMUNE SYSTEM HELPS PROTECT THE BODY FROM DISEASE


When an infection spreads too fast for the white blood cells to control it, helper T-cells join the battle
Helper T-cells are also special white blood cells that attach themselves to harmful organisms and make them harmless.
TH
The helper T-cells recognize the organism. They alert and co-ordinate other cells to fight the infection.
B-cells are cells that produce antibodies.
antibodies
B
TK
Killer T-cells (TK) kill infected host cells.
Organism is neutralized by antibodies.
TS
infected host cell
Macrophage destroys and cleans up the debris.
Suppressor T-cells (TS) signal the B-cells and T-cells to slow down reproduction once the disease has gone.
Some B-cells and Killer T-cells remain in the body. These are what give people immunity from disease.

GD39

Immunization (or vaccinations)

A very small amount of the germ is introduced into the body. This is generally done by injection, although the polio vaccine is given orally. The germ forces the body to produce T-cells and B-cells to fight it. People do not get sick, because the amount of the germ is so small. However, they may experience slight increase in temperature, which is a sign that their body is fighting the germ. Because a few T-cells and B-cells will remain in the body, they will quickly produce antibodies if the same germ enters the body again.

Immunizations are generally given as follows in the N.W.T.

Age	Immunization
1 month	- tuberculosis (only given nowadays in high risk areas)
2 months	- diptheria, whooping cough, tetanus - oral polio
4 months	- diptheria, whooping cough, tetanus - oral polio
6 months	- diptheria, whooping cough, tetanus
12 to 15 months	- measles, mumps, rubella (German measles)
18 months	- diptheria, whooping cough, tetanus - oral polio
*18 months to 5 years	- HIB (for meningitis)
5 to 6 years	- diptheria, whooping cough, tetanus
11 to 12 years	- rubella (German measles) for females only
14 to 16 years	- diptheria, tetanus - oral polio
Adults	- oral polio (every 10 years) - diptheria booster (every 10 years) - tetanus booster (every 10 years or in the case of a wound, if it occurs in the second half of the ten-year period) - T.B. test annually, if in high risk area

* recommended at 18 months

When the Immune System Fails

When the body's natural defences fail to protect a person from disease, s/he may require medical attention. Drugs may be necessary to fight the infection.

Antibiotics are drugs which will fight bacteria. They contain bacteria e.g., penicillin. They will not fight viruses.

BODY SYSTEMS

Cells are the basic building blocks of the body. There are many kinds of cells (e.g., muscle, bone, skin, etc.) The adult body contains trillions of cells.

Tissues are groups of like cells that have a specific function.

Organs are made up of tissues and have a specific function.

The major body organs are:	Function
1. BRAIN	- nervous system - regulates thinking, memory, balance, coordination
2. LUNGS	- respiratory system - provide air and oxygen for the body and exchange it for body wastes (carbon dioxide)
3. HEART	- circulatory system - pumps blood with nutrients and oxygen to all parts of the body
4. STOMACH AND INTESTINES	- digestive system - change food into forms that can be used by the body and eliminate wastes
5. LIVER	- digestive system - breaks down chemicals, cleans the body of harmful wastes; aids in digestion of fats, stores energy (in the form of glycogen)
6. KIDNEYS AND BLADDER	- excretory system - remove liquid wastes from the blood and produce urine which is stored and later removed from the urinary bladder

Related organs are grouped into a body system. For example, the heart, veins, arteries, capillaries are organs of the circulatory system.

Eleven body systems work together to carry out the many functions of daily living.

1. Digestive System
2. Circulatory System
3. Respiratory System
4. Excretory System

→ SUPPLY AND TRANSPORT

5. Immune System
6. Muscular System
7. Skeletal System
8. Integumentary (Skin) System

→ SUPPORT AND PROTECTION

9. Endocrine System
10. Nervous System

→ CONTROL AND REGULATION

11. Reproductive System → REPRODUCTION

NON-COMMUNICABLE DISEASES

At the turn of the century infectious diseases, such as pneumonia, influenza, tuberculosis and acute diarrhea, were the primary health dangers to the world. Because of public health advancements, these infectious diseases no longer pose the threat they once did. However, with this progress has come another group of basic health problems that we must face today, the chronic or non-communicable diseases.

As a group, the chronic diseases share certain characteristics. They are termed "chronic" because they linger. Their causes are frequently unclear and they often take a long time to develop. Chronic diseases usually reduce the body's level of functioning for an extended period of time. Due to their long life-span, their treatments are often fairly costly. Some chronic diseases cause progressive destruction to the tissues, and may never be cured.

Behavioural factors have a great impact upon the chronic diseases. Lifestyle, as well as immediate physical environment, are major determinants of cause and prevention.

Common non-communicable or chronic diseases include:

Type	Examples	
Cancer	Lung Cancer Skin Cancer Blood Cancer (Leukemia) Cancer of the Rectum or Colon Breast Cancer	Cervical Cancer Bone Cancer Cancer of the Stomach Cancer of the Bladder
Cardiovascular Disease	Atherosclerosis Coronary Artery Disease High Blood Pressure Heart Attack	Angina Pectoris Stroke Rheumatic Heart Trouble Congenital Defects
Respiratory Disease	Asthma Chronic Bronchitis Emphysema	

Diabetes	
Arthritis	
Rheumatism	
Epilepsy	
Muscular Dystrophy	
Multiple Sclerosis	
Allergies	
Cerebral Palsy	

GD42

Cancer

All cancers are diseases of the cell. Cancer interferes with the performance of the DNA within the nucleus of the cell. This defective nucleus can no longer regulate growth and allows abnormal cells to divide to form other abnormal cells. This results in the formation of tumours. However, not all tumours are necessarily **malignant**, (cancerous).

Cancer cells appear different from normal cells. Their nuclei are larger, they vary more in shape and size, and they undergo cell division more often. They may also be seen invading normal tissue.

In the earliest stages, the cancerous tumor is "**localized**", i.e., confined to one site. Most cancers originate on the surface of a tissue. For a time they remain on the surface, at the site of origin. If the spread of cancerous cells is assumed to be stopped then the cancer is considered to be in **remission**. If all the living cancer cells remain at the original site, the disease is still considered localized. However, some of the cancer cells may then penetrate the surface and invade the underlying tissues. The process in which cancer cells become detached from the original tumour and then carried through the lymph or blood streams to other parts of the body, is called metastasis.

The lymph nodes in the region near the original tumour site is the body's protective mechanism against roving cancer cells. If left untreated, cancer cells eventually spread to other parts of the body and become "**advanced**" cancer. At this point, death is usually inevitable.

Most cancers have no single cause, but rather a combination of causes that includes genetic, viral, chemical and physical factors, as well as the person's immune system. Heredity has also been identified as an important factor in determining the risk of breast cancer and a variety of rarer cancers. A chemical **carcinogen** is a cancer-producing agent. Cigarette smoke is the most deadly carcinogen in our environment today. Many cancers have also been related to carcinogens on the job and exposure to radiation.

Seven Warning Signals of Cancer

Change in bowel or bladder habits.

A sore that does not heal.

Unusual bleeding or discharge.

Thickening or lump in breast or elsewhere.

Indigestion or difficulty in swallowing.

Obvious change in wart or mole.

Nagging cough or hoarseness.

If you have a warning signal, see your doctor!

Major Cancer Sites

Site	Cause	Symptoms	Treatment
Lung cancer	· cigarette smoking is a major contributing factor. Risk of developing lung cancer is increased in proportion to - number of cigarettes smoked - length of time person has been smoking - age when smoking began - how deeply the smoke is inhaled · inhalation of industrial chemicals e.g., asbestos, uranium	· cough may be first symptom · persistent cough with blood in the sputum · may be no symptoms may go undetected	· surgery · radiotherapy (as an alternative to or in addition to surgery) · combination of radiation therapy and chemotherapy for one form of lung cancer
Skin cancer	· exposure to intense sunlight (especially caucasians with blue eyes and light hair) [basal cell carcinoma - the most common form of skin cancer] · exposure to X-rays or irritants e.g., alcohol [squamous cell carcinoma] · uncontrolled division of the colour-containing cells which are concentrated in moles, usually related in exposure to sunlight [malignant melanoma] · generic predisposition · burns	· a skin lesion which undergoes change in · colour · size · shape · sensation · consistency of surface characteristics	· removal if the growth is small enough · radiotherapy · chemotherapy applied locally
Cancer of the blood · lymphomas	· possibly virus-related · possibly genetic · abnormalities in cellular immunity	· enlarged, painless lymph nodes · enlarged spleen or liver · sweating, fever · itching · weight loss · weakness	· irradiation · chemotherapy
· leukemias	· excessive exposure to radiation and some chemicals e.g., benzene · possibly virus-related · possibly linked to genetic abnormalities	· tiredness · paleness (due to anaemia) · increased susceptibility to infection and haemorrhage · unexplained fever, weight loss, enlarged lymph nodes (in childhood leukemia) · lymph nodes, spleen, liver may be enlarged	· chemotherapy · radiotherapy · occasionally, x-ray therapy of the spleen

GD44

Site	Cause	Symptoms	Treatment
Cancer of the rectum or colon	- related to the amount of refined carbohydrates and low fibre content of North American diet - possibly genetic	- unexplained anaemia - blood in the stool - change in bowel habits	- surgery - radiotherapy
Breast cancer	- unknown - high risk women include: - women over 35 who have no children - women who had their first child after 35 - women who had their first period before they were 12 - women who have been menstruating for 30 + years - women whose mother or sister have had breast cancer	- a lump - persistent redness or skin irritation - changes in the nipples - enlarged lymph nodes in the armpit or neck	- surgery in combination with radiotherapy, chemotherapy or hormonal therapy - radiation * breast self-examination each month provides the best method for a woman to discover breast changes for herself.
Cervical cancer	- possibly virus-related	- vaginal discharge - irregular bleeding	- cryotherapy (use of extreme cold to destroy tissue) - electrocoagulation (use of an electric current to destroy tissue) - surgery - radiotherapy - radiation therapy * a pap test should be done regularly for all women over 16.
Bone cancer	- unknown - possibly related to radiation exposure in some areas	- pain/swelling	- surgery - radiotherapy
Cancer of the stomach	- declining rapidly, probably due to improved diet - possibly related to methods of preparing food e.g., smoking, barbecuing, frying	- stomach pains - distaste for certain foods - digestive discomfort - rapid weight loss - vomiting	- surgery
Cancer of the bladder	- related to industrial environmental agents - also related to exposure to certain chemicals in food, plastics, air and water - possibly related to smoking - possibly virus-related	- blood in the urine - discomfort - increased frequency in urination	- surgery - radiotherapy

GD45

Cardiovascular Disease

Cardiovascular disease includes many different conditions and disorders affecting the heart and blood vessels.

Condition	Cause	Brief Description
Atherosclerosis	- diet - smoking - high blood pressure - lack of exercise - stress - hormones - heredity } all possible contributors	- the most common form of hardening of the arteries - the body is unable to handle certain fatty substances, such as cholesterol - the fatty substances are deposited in the inner lining of the walls of the arteries, causing the channels through which the blood flows to narrow
Coronary artery disease	- caused by atherosclerosis	- when the arteries become narrow, the heart receives less blood - this makes the heart muscle less efficient due to the lack of proper nourishment - most common among men, 40 to 60 years old - becoming more common among younger people
High blood pressure	- may run in families - most common amongst people who are overweight - aggravated by nervous tension	- also known as hypertension - occurs when the heart has to work harder to pump the blood through the arteries - pressure in the arteries increases - heart muscle may enlarge - characterized by headaches, dizziness and/or fatigue
Heart attacks	- usually caused by atherosclerosis in the coronary arteries - diet - lack of exercise - smoking - stress	- sometimes referred to as coronary thrombosis, coronary occlusion or myocardial infraction - sudden closing of a coronary artery by a blood clot (thrombosis) - heart is deprived of its blood supply - characterized by a feeling of pressure in the chest, sweating, weakness, shortness of breath, nausea, vomiting and sometimes loss of consciousness - higher incidence among men
Angina pectoris	- may be result of exertion, excitement or digestion of a heavy meal	- the blood supply to the heart muscle is insufficient at that moment - characterized by a feeling of pressure in chest which radiates down the arm - may be controlled by medication

GD46

Condition	Cause	Brief Description
Stroke	- caused by a blood clot that forms in the artery	- when the blood supply to any part of the brain is reduced or completely cut off, nerve cells, and therefore that part of the body which they control, cannot function normally - person becomes partially paralyzed, may be unable to speak
Rheumatic heart disease	- repeated attacks of rheumatic fever	- a complication of streptococcal sore throat - symptoms of rheumatic fever include: - a persistent, light fever - pain in the joints and muscles - poor appetite - failure to gain weight - unexplained fatigue - frequent nose bleeds
Congenital defects	- heart has failed to develop normally during the prenatal period	- may necessitate surgery - children with congenital heart defect require close medical supervision during their growing years

Warning Signals

Since cardiovascular ailments are not always accompanied by symptoms, it is often difficult for a person to recognize the onset of heart disease. However, the body sometimes sends out warning signals that should be heeded immediately. It is important for an individual to consult a doctor if s/he notices any of the following dangers.

- Unusual shortness of breath. Shortness of breath associated with moderate exertion might be an early symptom of a weakened heart muscle.

- Pain or a tight feeling in the chest during exertion or excitement. Extra pressure may cause pain even when the heart is completely well, but if you have any discomfort it is best to play it safe and consult your physician.

- Swelling of the feet and ankles. Circulation becomes insufficient and fluid may gather in the tissues when the heart fails to pump with its customary vigour.

- Persistent fatigue. If you frequently feel very tired, it may be a sign of hypertension or heart difficulty.

Anyone who is worried that his/her heart is not behaving normally is strongly recommended to see his/her physician.

Protecting the Heart

Positive lifestyle practices which help to protect the heart include:

- watching your weight and keeping it under control;
- eating nutritious meals;
- exercising regularly;
- avoiding cigarette smoke;
- learning to relax;
- learning to cope appropriately with stress.

GD47

Respiratory Diseases

Disease	Cause	Symptoms	Brief Description
Asthma	- allergy to external irritants such as dust or pollen - respiratory infection - stress	- attacks of wheezing - difficulty breathing - shortness of breath - coughing - between attacks, patients may appear relatively free of symptoms	- the bronchioles contract as a result of a spasm, constriction or mucus blockage - can be prevented by avoiding causal allergens, or using relaxation methods to cope with stress
Chronic bronchitis	- respiratory irritants - smoking - overweight - lack of exercise	- persistent sputum-producing cough - shortness of breath - wheezing	- damage caused to the airways through chronic irritation of the mucous lining by smoke, dust, etc.
Emphysema	- smoking - air pollution - occupational hazards	- shortness of breath - difficulty breathing	- a deterioration of the lungs - the walls of the tiny air sacs lose their elasticity and tear, thus reducing the ability of the lungs to exhale - extremely disabling, if severe

GD48

Other Chronic Diseases

Disease	Cause	Symptoms	Brief Description

Diabetes	- people at risk include:
	  - relatives of diabetics
	  - obese people
	  - mothers of large babies
		- frequent urination
		- excessive thirst
		- craving for sweets and starches
		- weakness
			- a disorder of the body's metabolism that results from a deficiency of insulin, produced in the pancreas
			- can often be controlled by exercise and diet
			- may have to use insulin

Arthritis		- difficulty moving joints - severe pain in the joints	- rheumatoid arthritis - inflammation of the joints - osteoarthritis - deterioration of the cartilage between the bones - rest, light exercise, physical therapy can prevent deformity
Rheumatism	- emotional disorders - strains - tiredness - cold } can trigger it	- aches/pains	- includes lumbago, fibrositis - includes most aches and pains which do not involve the joints
Epilepsy	- a disorder of the brain functioning	- grand mal (the most severe) - victim collapses, body stiffens and muscles go into spasms - petit mal - victim exhibits unusual behaviour e.g., abnormal rage, fear, incoherent speech, along with some minor twitching	- disordered brain waves which precipitate sudden attacks of violent muscle contractions and/or unconsciousness - can be controlled by drugs - is not related to intellectual impairment
Muscular dystrophy		- eventually unable to walk	- a gradual wasting away of muscle tissues - life expectancy may be decreased - no cure, although effects can be reduced by physical therapy
Multiple sclerosis		- loss of muscular co-ordination - loss of balance - possible difficulty controlling bladder and bowels - paralysis, speech or vision impairment, trembling, numbness	- disintegration of the sheaths which cover the nerve fibres in the brain and spinal cord - usually strikes people between 20 and 40 - treatment includes physical therapy, rest and a balanced diet

GD49

Disease	Cause	Symptoms	Brief Description
Allergies	- numerous	- runny noses - hives - watery eyes - rashes - headaches - coughs - wheezing - sneezing	- overcompensation of the body's immune system, which produces special antibodies to attack the allergen
Cerebral palsy	- result of damage to the central nervous system (usually during or shortly after birth) - head injury - malnutrition - encephalitis - meningitis - oxygen deficiency	- mild co-ordination problems - spasms - severe convulsions	- no medical treatment can repair damaged brain tissue - many victims need partial care, some need complete care

Adapted from: Harvey, D. and White, D. (ed) "Chronic Diseases", Health Education Methods Project for Elementary School Teachers' Ottawa, Ont. Health and Welfare Canada, 1983.
Book for Teachers and Students, Canadian Cancer Society, 1980.

POSITIVE LIFESTYLE PRACTICES

Many of the chronic diseases described in the previous section can be prevented or minimized by adopting positive lifestyle practices.

Positive lifestyle practices include:

- exercising at least three times a week
  - improves physical well-being
  - helps relieve stress
  - helps control weight
- maintaining a reasonable weight
- eating nutritious meals and snacks
- avoiding use (overuse) of alcohol and other drugs (including tobacco)
- getting adequate rest and sleep
- learning to control stress

RISK FACTORS

Risk factors are conditions or habits that can increase the chance of developing disease.

Most of us have some risk factors. When reviewing a person's risk factors, it is important to remember some principles:

- risk factors are cumulative
- concentrate on changeable risk factors
- only one change should be made to lifestyle at a time (Changing 20 habits isn't easy.)
- an individual will change his/her lifestyle only when he/she is ready and only with support
- few people will continue with activities they don't enjoy. So, encourage them to find and do activities they find interesting and enjoyable.

In addition to the risk factors identified, a comparison of positive and all negative health habits will reveal how "AT RISK" a person is.

Risk factors can be categorized as follows:

Controllable	Modifiable	Uncontrollable
Smoking Lack of Exercise Overweight (usually)	High Blood Pressure Cholesterol Stress Diabetes	Sex Heredity Age

The greater the number of risk factors, the greater the chances of heart disease.

Controllable:

Smoking

One of the most important risk factors to **ELIMINATE**, is **SMOKING**. Based upon previous studies, eliminating smoking can significantly reduce your risk of heart attack (regardless of how long you have smoked).

Smoking is harmful because:

- It causes blood vessels to become temporarily smaller so that the heart has to pump harder and faster. This raises your blood pressure.
- Less oxygen is available for use by the heart and the rest of the body.
- It irritates the lungs. This leads to breathing difficulties and puts a strain on the heart.

RECOMMENDATIONS TO STOP SMOKING - (Try one or more of the following)

- Decide not to smoke - take one day at a time.
- Stop "Cold Turkey". For example, decide you are not going to smoke anymore.
- Taper off smoking, for example, set daily goals, reducing the number of cigarettes you smoke.
- Get a friend or relative to quit smoking with you.
- Join a "stop smoking" clinic or group.
- Approach whichever stop smoking program you use with a POSITIVE ATTITUDE not with grim determination.
- Watch your weight.

GD51

Lack of Exercise

Inactivity predisposes a person to many injuries. This is due to weak muscles, poor flexibility, and inability to meet unexpected energy demands on the body. Also, lack of exercise predisposes a person to diseases such as coronary heart disease, hypertension and diabetes.

Regular exercise provides several benefits for you.

- It improves circulation.
- It tones muscles.
- It helps handle stress better, since it relaxes the body.
- With proper diet, it can help control weight.
- By reducing tension and relaxing the body, regular exercise can lower the blood pressure and heart rate.

Overweight

- When a person is overweight, the heart has to pump harder to supply blood to the excess weight.
- Overweight people frequently have breathing difficulties because the lungs have less room to expand. This results in less oxygen being taken in.
- High blood pressure frequently occurs in people who are overweight. The heart has to work even harder when high blood pressure and overweight occur together.

Suggestions to lose weight

- Follow a prescribed diet as recommended by the doctor and dietitian.
- Eat slowly. Always put the fork down while chewing.
- Always serve yourself last.
- Lose weight gradually.
- Restrict pure sweets and sugars in diet.
- Read product labels to ascertain the ingredients and their proportions.
- Reward yourself for weight loss with non-food items.
- Set realistic goals for weight loss.

Modifiable:

High Blood Pressure

- Blood pressure is the force of blood against the artery walls.
- In high blood pressure, there is increased force against the artery walls making the heart work harder.
- High blood pressure can result in damage to the arteries. This can lead to damage of the brain, heart and kidneys.
- People can have high blood pressure without even knowing it.

Suggestions to control high blood pressure

- Have blood pressure checked as frequently as the doctor recommends.
- Follow medical advice about medication, diet, and changes in health habits.
- Medication to control high blood pressure must be taken because when stopped, blood pressure (BP) will go up again.
- Keep taking your medications whether you feel well or not. DO NOT stop medication because of side effects but INFORM the doctor about how you are feeling.
- Follow a low salt diet if ordered by the doctor.
- Stop smoking.
- Since tension is believed to be a factor in high blood pressure learn relaxation techniques to decrease stress.
- Lose weight because the heart has to work harder when you are overweight.
- Exercise regularly: fit people have lower blood pressure.
- Notify your doctor if you have any symptoms of a headache or dizziness or if you feel part of your treatment is not working.

Cholesterol

- Fatty substances can be deposited more easily in and on the walls of the arteries when there is an excess of fats circulating in the blood stream.
- This depositing of fatty substances on the inner lining of the arteries is called atherosclerosis.
- The opening of the arteries becomes smaller and smaller making it harder for the heart to pump blood through the blood vessels. This results in high blood pressure and an enlarged heart.
- Foods high in saturated animal fats are: marbled meats (beef, lamb, pork, ham), butter, cream, whole milk, and cheese made from cream and whole milk.
- Foods high in saturated vegetable fats are: lard, solid shortenings, coconut oil, palm oil, non-dairy milk and cream substitutes.
- Foods high in cholesterol are: organ meats, prepared luncheon meats, hot dogs, bacon, egg yolks, and shrimp.

Suggestions to control fatty substances intake

- Limit intake of egg yolks.
- Limit use of organ meats and shellfish.
- Use skinned chicken, turkey, veal and fish more often in your meal plans.
- Eat lean beef, pork, lamb and ham less frequently and in smaller portions (For example, 3 ounce portions).
- Rather than frying foods, bake, broil, boil, roast or stew fatty foods.
- Limit use of prepared luncheon meats e.g., sausage, cold cuts.
- Use polyunsaturated vegetable oils and margarines.
- Use skimmed milks and cheeses.
- Use foods of plant origin - For example, fruits, vegetables, grains, cereals and nuts.

Tension and Stress

- Emotional stress and tension cause the body to produce a substance called adrenalin.
- Adrenalin causes the heart to pump harder and faster. This puts extra strain on the heart.
- Stress and tension may raise blood pressure and blood cholesterol levels.
- People who live in almost constant stress and are unable to relax, tend to have increased blood pressure, increased heart rate and increased blood cholesterol level.

Suggestions for reducing tension and stress

- Know what makes you anxious or tense. For example, work, traffic.
- Avoid situations that make you tense, if possible.
- Learn relaxation and exercise techniques.

Diabetes

- Diabetes is an abnormal condition of the body in which sugars and starches cannot be broken down.
- The excess sugar is left in the blood and early atherosclerosis develops.
- There seems to be a connection between diabetes, atherosclerosis, high bood pressure and overweight.

Suggestions to decrease the risks associated with diabetes

- Have yearly checkups to detect and treat diabetes (diabetes runs in families).
- If you are diabetic, follow your doctor's prescribed medical regime.
- Regular exercise programs frequently lessen the amount of insulin needed.
- Good foot care is essential to slow down the premature onset of vascular disease, e.g. atherosclerosis.

Uncontrollable:

Male

- Males have coronary heart disease more frequently than females.
- Males should make an effort to eliminate or reduce the controllable risk factors.

Heredity

- The risk of developing heart disease increases if family members have a history of heart disease.
- If heart disease is present in your family you should reduce or eliminate the risk factors you have control over. You can modify your lifestyle.
- Teaching children about proper diet, avoiding smoking, and maintaining their normal weight will reduce their risk of developing atherosclerosis.

Age

- Not much can be done about this risk factor. As you increase in age, the chance of heart disease increases. Therefore, reduce the other risk factors for heart disease.

Summary

Prudent living is a lifestyle which minimizes the risk of disabling diseases which can be prevented and/or can be controlled.

This includes stopping smoking, controlling high blood pressure, reducing intake of fatty substances, coping with stress constructively, physical fitness through prescribed exercise program and weight control through proper nutrition.

LIFESTYLE FACTS:

Preventive medicine has gained popularity due to the reawakening of health consciousness and rising health care costs. Lifestyle-created illnesses are considered the biggest problem. The "baby boom" children are now entering the heart attack crisis years.

However, the current base of financial support is no longer quite as broad as it was. Statistics Canada has recently released a survey that indicates both women and men have increased their lifespan (women to 80 years and men to 70 years). There has been a decline in the birth rate since 1970, and it has not been high enough to replace the adult population since 1972.

Prevention is the best alternative to spiralling health costs. By modifying risk factors and incorporating positive health habits, one would be assuming responsibility for his/her own healthy lifestyle.

Adapted from: 'Provincial Fitness Leadership Development Program - Fitness Leader Manual', Manitoba Health, Health Promotion Directorate, Fitness Section.

GRADE 9

FAMILY LIFE

THE FAMILY LIFE UNIT

INVOLVEMENT OF PARENTS

Parents are the primary educators of their children on family life education. Schools should play a supporting role to supplement parental education.

Generally, most parents support family life education in school. However, they may have a number of questions about the program before they will give that support. For that reason, it is vital for schools to involve parents in discussing the unit, ***before using the materials.***

Parents must be given an opportunity to find out what will be taught in the lessons, to meet the teachers (and other resource people) who will be delivering the program, and to ask questions. This can be done most effectively by holding a parent information session.

This should include:

- the principal of the school
- teachers who will be teaching the lesson
- any resource people, such as the community health nurse, who might be involved with the lessons.

Most parents attending the meeting want to find out about the content, objectives and methods used in the unit. Basic information during the session should include:

- a brief outline of the program
- a sample of some of the activities in which students will participate
- sample handouts
- copies of any activities in which parents will participate during the evening
- translation of goals, etc., as necessary
- viewing of any films which may be used

It is important to emphasize that the purpose of the Family Life unit is to support, and not to replace, the parent or family role and responsibility. The parent information session is one important way for teachers to show that they want and welcome parental support, involvement and concern.

Parent meetings are often a good opportunity to initiate ongoing parenting groups. Parents may decide to meet regularly during the year to discuss topics related to Family Life or other health programs going on in the school. The G.N.W.T. Family Life Education Consultants may be able to assist in the development of parent groups.

Following the meeting, parents will be able to decide whether they want their children to be involved in the lessons.

PARENTS, WHO DO NOT WISH THEIR CHILD(REN) TO PARTICIPATE IN THE LESSONS, MAY INDICATE TO THE SCHOOL THAT THEY WILL BE WITHDRAWING THEIR CHILD(REN) FROM THIS PARTICULAR UNIT. PARENTS MUST MAKE THE FINAL DECISION.

Schools must make alternative arrangements for students who are withdrawn from these classes.

In order to withdraw their child(ren) from the classes, parents must sign a withdrawal form (see sample).

FAMILY LIFE CLASSES

NAME: _____

GRADE: _____

I do not wish _____ to participate in the Family Life classes which will be offered by the school in the near future.

_____

Parent/Guardian signature

_____

Date

Because of the need to foster a positive classroom atmosphere, teachers need to take time to get to know their students. Teachers should teach the Mental and Emotional Well-Being and the Growth and Development units before introducing the Family Life lessons. Many of the skills which students will be developing in the Mental and Emotional Well-Being unit, such as decision-making skills, communication skills, relationship building and coping skills, will assist in the development of an atmosphere conducive to effective Family Life education.

FAMILY LIFE

GRADE: 9 LESSON: 1 THEME: FAMILIES

CONCEPT: MALES AND FEMALES HAVE EQUAL POTENTIAL

PREPARATION:
1. Prepare a class set of the Is This True? Questionnaires (Activity Sheet FL104)
2. Prepare a class set of the Gender Role Questionnaires (Activity Sheet FL105)
3. Prior to the class, invite a person or people from the community to discuss stereotyping

VOCABULARY: stereotyping, gender role, capabilities

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: Page FL63 It is important that males and females have choices and are not stereotyped because of their gender. People who are stereotyped may not feel valuable or capable.
i) describe male and female gender role stereotyping	1. Complete the Is This True? Questionnaire.	Refer to Activity Sheet FL104. Have students complete the questionnaire. Discuss what is meant by stereotyping. Stereotyping is the idea that all members of a large group share the same characteristics in a fixed way. There are racial, sexual and physical stereotypes. Stereotyping ignores the fact that individuals are unique. Gender role stereotyping is an expected behaviour as a male or female.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	2. Complete the Gender Role Questionnaire.	Refer to Activity Sheet FL105. Have students complete the questionnaire individually, then discuss in small groups.
	3. List activities, careers and jobs that are of interest to males and females.	Have students brainstorm to produce the list, e.g., - nursing - teaching - secretarial
	4. Categorize the items on the list based on capabilities.	Divide the class into small groups, with equal numbers of males and females in each group, if possible. Have the groups examine the list from Activity 3, and categorize the jobs into those which males, those which females, those which both can do, based on capabilities. **Males** | **Females** | **Both** - | - | - nursing - teaching - etc. Discuss with the class whether choices are generally made based on gender, or based on capabilities and interests.
ii) identify factors that contribute to changes in gender role stereotyping	5. List some factors that may contribute to changes in gender role stereotyping.	Some factors include: - parents and other caregivers who model roles (gender identification) - the media - community members who model changing roles - peers - culture and traditions - individuals who are successful at carrying out new activities beyond the usual gender roles.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	6. Discuss overcoming gender role stereotyping with someone who has successfully done this.	If possible, invite an individual or a panel of people from the community who have overcome gender role stereotyping to discuss it with the class. Have students prepare questions ahead of time.
	7. Write a story about someone who is successful in a job or career which is outside the usual gender role.	Students may write a true or imaginary story. Some examples might be: - a woman who becomes a pilot - a woman who becomes a heavy equipment operator - a man who stays home to look after his children The story should include some of the difficulties which s/he had to overcome, and how s/he dealt with the difficulties to become successful.

IS THIS TRUE?

FL104

Read each statement. Circle T if you think the statement is TRUE, F if you think it is FALSE. Discuss.

1. All teachers are mean. T F
2. All blondes are stupid. T F
3. All boys like hockey. T F
4. Men don't cry. T F
5. Girls are no good at math. T F
6. Parents don't understand their children. T F
7. Only boys like hockey. T F
8. Girls make the best nurses. T F
9. Only men can be heavy equipment operators. T F
10. Girls are always neat and tidy. T F

GENDER ROLE QUESTIONNAIRE

FL105

Read the following list and check whether male, female or both males and females can do the tasks.

WHO DO YOU THINK CAN...

	Male	Female	Both
a. take out the garbage?			
b. wash the dishes?			
c. choose nursing as a career?			
d. babysit?			
e. put away chairs?			
f. diaper a baby?			
g. have a newspaper route?			
h. drive a skidoo?			
i. clean the bathroom?			
j. contribute to the family income?			
k. be a ballet dancer?			
l. make bannock?			
m. ask someone to dance?			
n. phone the opposite sex?			
o. wear jewelry?			
p. wear long hair?			
q. grow long fingernails?			
r. set a trapline?			
s. make mocassins?			
t. coach a volleyball team?			
u. shake hands when greeting others?			
v. move furniture?			
w. build a house?			

FAMILY LIFE

GRADE: 9 LESSON: 2 THEME: FAMILIES

CONCEPT: FAMILY MEMBERS PLAY AN IMPORTANT ROLE IN MEETING THE NEEDS OF A NEWBORN

PREPARATION:
1. A photograph of a newborn baby
2. Prior to the class, invite a new mother, baby and community health nurse to the class to demonstrate baby care

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: — The family teaches its members about love, care and nurturing throughout the years. It provides for such needs as clothing, shelter, food, cleanliness, love and a sense of belonging. It imparts values such as respect, honesty, truth, justice and non-exploitation. The addition of a new family member brings many responsibilities to parents and other family members.
i) describe the needs of a newborn	1. Make a list of the needs of a newborn	Show students a photograph of a newborn baby. In small groups, have them brainstorm the needs of a newborn. Needs of a newborn include: - to sleep for many hours a day - to be fed six to eight times a day - to be changed frequently (after every bladder and bowel movement) - to be bathed daily - to be held, touched, talked to, sung to - to be loved - to be examined by a nurse or doctor

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	2. Observe a demonstration on how to care for the needs of a newborn.	Invite a new mother and baby, and public health nurse to class. Have the public health nurse demonstrate baby care e.g., bathing, dressing etc. Encourage students to ask questions about the newborn's care and characteristics.
ii) explain the roles of family members in meeting the needs of a newborn	3. Describe how different family members can help in meeting the needs of a newborn.	Use the list from Activity 1. Record responses on a chart as illustrated:

Basic Needs	Mother	Father	Other Relative	Other
food				
providing clothing				
bathing				
changing diapers				
love				
holding/ touching				
smiling/ talking				
laundry				
medical				

It is important to emphasize how all family members, especially the father have a role to play.

Discuss

FAMILY LIFE

GRADE: 9 LESSON: 3 THEME: FAMILIES

CONCEPT: EFFECTIVE PARENTING ENHANCES FAMILY LIVING

PREPARATION:
1. Prepare 2 students to do a roleplay for Student Activity 1
2. Prepare a class set of Encourage Them (Activity Sheet FL106A)
3. Prepare a class set of Responses Which Give Encouragement (Activity Sheet FL106B)
4. Prepare a class set of I-Messages (Activity Sheet FL107)
5. Prepare a class set of Logical Consequences (Activity Sheet FL108)

VOCABULARY: effective, encouragement, logical, consequences, I-messages

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to i) describe effective parenting	Students 1. List skills involved in effective parenting	Background Information: — It is important for students to learn skills related to parenting. It is also important however, that teachers ensure students learn skills which are culturally appropriate. Have 2 students prepared ahead of time to roleplay two different parenting scenarios a) parent - hitting child - shouting at child - not listening to child - giving junk food for supper b) parent - hugging child - explaining carefully to child - listening carefully - preparing nutritious meal Have students decide which is the more effective parent. Discuss effective parenting.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Effective parenting goes beyond nurturing and the provision of basic needs of family members. Effective parenting includes skills such as: - encouragement (focussing on strengths) - effective communication i.e., reflective listening, exploring alternatives, problem ownership, I-messages - natural consequences - logical consequences
ii) demonstrate the parenting skill of encouragement	2. Describe the parenting skill of encouragement	Encouragement focusses on a person's assets and strengths. At first, encouragement and praise appear to be the same process because they look at positive behaviours. However, encouragement is given for ***any*** effort or improvement; while praise is a type of reward given for well-done, completed tasks. Encouragement can be used often in day-to-day relationships with family members and friends.
	3. Select and practise giving encouragement	Refer to Activity Sheets FL106A and 106B. Divide the class into small groups. For each situation, have students provide encouragement. (Activity Sheet FL106B provides some suggestions for giving encouragement.)
	4. Write a scenario that demonstrates encouragement and roleplay the scenario	In small groups, have students design situations that demonstrate encouragement. Roleplay the situation for the rest of the class.
iii) demonstrate the parenting skill of effective communication	5. Demonstrate the use of I-messages	Refer to Activity Sheet FL107. In small groups, have students practise responding to situations using I-messages. Explain that I-messages remove any indication of 'blame' or 'guilt', and allow comments to be made in a non-threatening way.

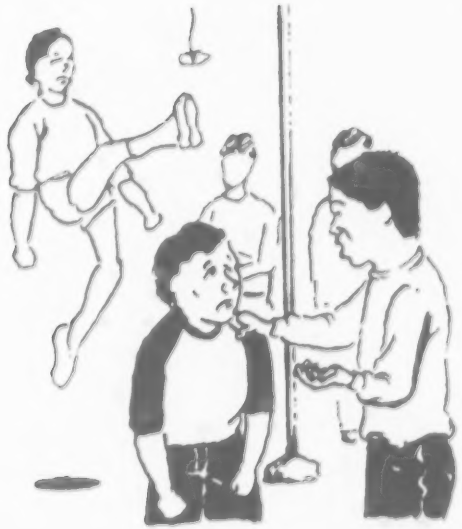
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
iv) demonstrate the parenting skill of logical consequences	6. Describe the parenting skill of logical consequences.	Logical consequences is a method of disciplining individuals which holds the individual responsible for his/her behaviour. Logical consequences permit a person to make choices and experience related consequences. In other words, the consequences must 'fit' the behaviour in a logical way. For example, a younger brother and sister are arguing and you are trying to watch your favourite T.V. program. You might say "You two may settle down and watch T.V. with me or leave the room. You decide which you'd rather do." If the arguing continues, you say nicely "I see you've decided to leave the room. You can come back when you settle down." If necessary you can kindly, but firmly, remove them to another room.
	7. Select and practise applying logical consequences.	Refer to Activity Sheet FL108. In small groups, have students apply logical consequences for that situation.
	8. Write a scenario that demonstrates logical consequences and roleplay the scenario.	In small groups, have students design situations that demonstrate logical consequences. Roleplay the situation for the rest of the class.

ENCOURAGE THEM!

FL106A

Situations

1. Your friend complains that math is too hard for her.
2. A child you are babysitting puts his runner on the wrong foot.
3. A younger brother or sister has just helped you clean up the kitchen.
4. Your brother tried out for the Arctic Winter Sports team and didn't make it.
5. A child who is not very good at painting has painted you a picture.
6. An older boy has helped a younger child in the yard.
7. A friend has just asked you what you think of her carving which she has just finished, and doesn't like.
8. A friend has just split up with her boyfriend.
9. Your mother made a special cake for your birthday, even though she hates baking.
10. A friend has to go for a job interview tomorrow and is really nervous about it.



RESPONSES WHICH GIVE ENCOURAGEMENT

FL106B

Phrases that show acceptance:

"I like the way you handled that."

"I'm glad you're enjoying doing that."

"I'm glad you're pleased with it."

"Since you're not satisfied, what do you think you can do so that you will be pleased with it?"

"How do you feel about it?"

Phrases that focus on contributions, assets, and appreciation:

"Thanks; that helped a lot."

"It was thoughtful of you to _____."

"Thanks. I really appreciate _____, because it makes my job much easier."

"I need your help on _____."

"I really enjoyed today. Thanks."

"You are good at _____. Would you do that for the family?"

Phrases that show confidence:

"Knowing you, I'm sure you'll do fine."

"You'll make it!"

"That's a rough one, but I'm sure you'll work it out."

"You'll figure it out."

Phrases that recognize effort and improvement:

"It looks as if you really worked hard on that."

"It looks as if you spent a lot of time thinking that through."

"I see that you're moving along."

"Look at the progress you've made." (be specific; tell how)

"You're improving in. . ." (be specific)

"You may not feel that you've reached your goal, but look how far you've come!"

I-MESSAGES

FL107

For each situation, give an I-message response. E.g., I know that you are hungry, but you have to wash your hands before you eat.

1. John, who is 3, has just spilt his juice.

2. Sarah is crying because the arms fell off her doll.

3. Your brother has just broken your ghetto blaster which he borrowed.

4. Margie just walked into the house with mud all over her shoes.

5. Your sister has just lost her job and is upset about it.

6. You are visiting a friend with the child you are babysitting. The child breaks a glass.

LOGICAL CONSEQUENCES

FL108

Steps in applying logical consequences

1. Give the person a choice ***and*** accept the person's decision.
2. Use a friendly tone of voice (reflects respect and acceptance).
3. Make sure the consequence is ***logically*** related to the misbehaviour.
4. When following through with the consequence, assure the person there will be a chance to try again later.
5. If a misbehaviour is repeated, extend the time that must elapse before the person may try again.

Situations

1. You are babysitting and the child keeps asking for a drink of water.
2. You are trying to talk to your best friend. Your younger brother or sister keeps interrupting.
3. Your brother borrowed your bicycle. He left the bike at his friend's house instead of putting it in the back yard.
4. It's a rainy day and some neighbour's children are playing inside with your son. It is time for them to leave, and the room is a mess.

Example: A younger brother and sister are arguing while you are trying to do your homework. You might say "You both settle down or leave the room. You decide what you're going to do." If they continue to argue, say "I see you have decided to leave the room. You are welcome to come back when you settle down." If they do not settle down, the consequence is that they have to leave the room until they have settled down.

FAMILY LIFE

GRADE: 9 LESSON: 4 THEME: FAMILIES

CONCEPT: THERE ARE MANY SUPPORT SYSTEMS IN THE COMMUNITY AVAILABLE TO FAMILIES

PREPARATION: 1. Prior to the class, arrange with an agency that provides support for families for a visit by the class or have a representative visit the class.

VOCABULARY: support

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify family support systems in the community	Students: 1. Make a list of agencies and organizations within the community that provide support for families.	Background Information: Brainstorm what community agencies and organizations exist to help families. Examples include: - nursing stations - social services - religious organizations - Canada Employment Centres (Outreach Projects) - recreation committees - R.C.M.P. - legal aid - educational facilities - band council - women's groups - service clubs e.g., Lions - Alcoholics Anonymous - Alateen - crisis line - youth centres - alcohol and drug programs

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) identify the roles of family support systems iii) describe how to effectively use the systems	2. Select one of the support systems and prepare a brief report on its roles and how to use the system.	In pairs, have students research one or more of the support systems identified in Activity 1. They should contact the agency with a set of prepared questions. Sample questions might include: - What types of services are provided that would help families? - Where are the services provided? - To whom are they available? - How can someone use these services? Photographs etc. can be used to familiarize other students with the agency and to enhance the report.
	3. Prepare a class book on 'Family Support Systems in the Community'.	Have students prepare a class book from the information collected for their research. Display it in the school.
	4. Select one of the support agencies to discuss with its representative.	As a class, select one of the support agencies to visit and discuss its roles, or invite a representative of the agency to class to discuss roles and how to access the system. Emphasis should be placed on responsible use of the agency.

FAMILY LIFE

GRADE: 9 LESSON: 5 THEME: HUMAN DEVELOPMENT AND REPRODUCTION

CONCEPT: THE UNION AND DEVELOPMENT OF REPRODUCTIVE CELLS DETERMINE THE CHARACTERISTICS OF AN OFFSPRING

PREPARATION:
1. Arrange for students to bring in photographs of themselves and their parent(s)
2. Prepare a class set of the Hereditary Traits worksheet (Activity Sheet FL109)
3. Prepare overhead transparencies of Activity Sheets FL110, 111A and 111B
4. Prepare a class set of the Multiple Births worksheet (Activity Sheet FL112)

VOCABULARY: identical, fraternal, zygote, chromosomes, genes, heredity

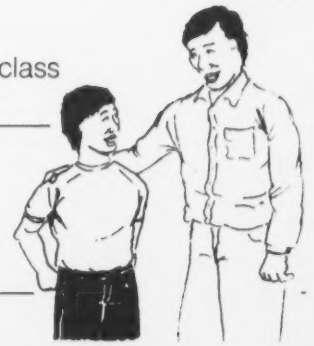
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information: Page FL66 to FL67 Students should have studied Reproductive Systems and Processes in prior grades. It is recommended that teachers conduct an initial assessment and review materials from Grades 7 and 8, if necessary.
i) describe how the characteristics of an offspring are determined	1. Match adults and their offspring.	Prior to the class, arrange for students to bring in photographs of their parent(s) and a photograph of themselves. Arrange on the walls. Have students match parents and offspring. (This activity can also be done using animals and their offspring e.g., dog and puppies.) Discuss how students were able to match parents and offspring. Explain that many of our characteristics are derived from our parents.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	2. Explain what is meant by fertilization, zygote, chromosomes, genes and heredity.	Use a dictionary to help explain these terms. ***Fertilization (conception):*** the union of an egg and a sperm. ***Zygote:*** the single fertilized cell that results from the joining of the sperm and the egg. ***Chromosomes:*** thread-like structures that contain genetic information. The ***Zygote*** contains 46 chromosomes - 23 from the egg; 23 from the sperm. The chromosomes carry the hereditary information from both parents and from generation to generation. ***Heredity:*** the passing on of characteristics from parents to child. ***Gene:*** the basic unit of heredity. Genes are found within chromosomes. Genes determine every characteristic of the offspring.
ii) describe how inherited traits determine personal uniqueness	3. Complete the Hereditary Traits worksheet.	Refer to Activity Sheet FL109. Have students complete the worksheet individually. Then compile the class data (e.g., on bar graphs) to illustrate similarities and differences.
iii) describe how the sex of an offspring is determined	4. Illustrate how the sex of a male and female is determined.	Refer to Activity Sheet FL110. Using the overhead transparency, describe how the sex of an offspring is determined. Have students draw a diagram to answer the following questions: What will be the sex of the offspring if... i) sperm X fertilizes an egg? (XX = female) ii) sperm Y fertilizes an egg (YX = male)

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
iv) identify how multiple births are determined	5 Describe how multiple births are determined.	Refer to Activity Sheets FL111A and 111B. Using the overhead transparencies, describe how identical twins and how fraternal twins develop.
	6 Complete the Multiple Births worksheet.	Refer to Activity Sheet FL112A. Refer to Activity 112B for the answers. Have students complete the worksheet.
	7 Describe what it is like to be a twin.	If there are any twins in the community, invite them or their mother to the class to discuss what it is like to be a twin. If there are no twins, have students imagine what it would be like.

HEREDITARY TRAITS

FL109

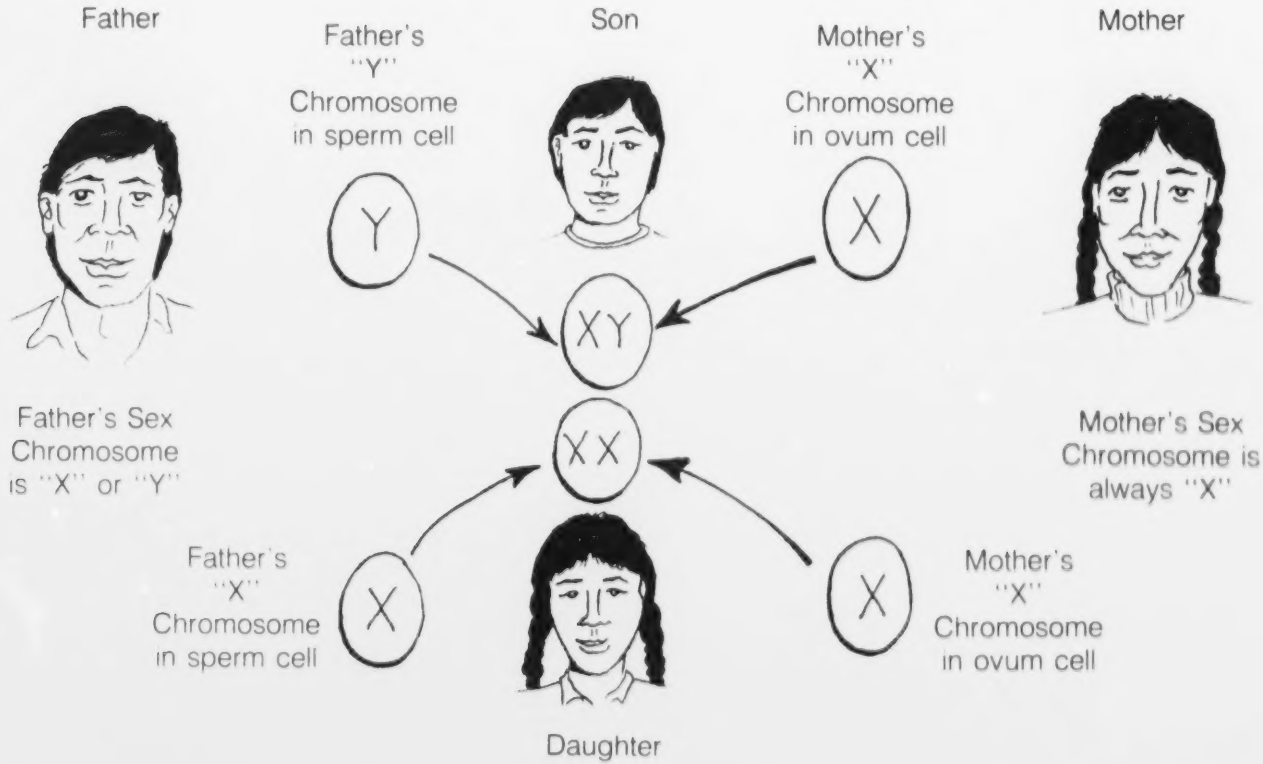


Do you have this trait? (Answer only the first column individually. After that is completed, you will compile the class information together.)

Traits	I have this trait	Numbers of classmates who have this trait Explain
1. Gender (female or male)		
2. Hair colour (black, brown, red, blonde)		
3. Hair form (curly, straight, wavy)		
4. Dimples (Yes or No)		
5. Eye colour (black, blue, blend)		
6. Skin colour (fair, medium, dark)		
7. Hitch-hiker thumb		
8. Widow's peak hairline		
9. Longer second toe		
10. Ear lobes (attached or unattached)		
11. Handedness (left handed, right handed)		
12. Tongue rolling (Yes or No)		

DETERMINATION OF THE SEX OF OFFSPRING

FL110

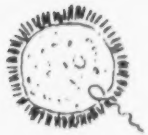


The offspring gets half its chromosomes from the mother and half from the father. The father's sex chromosome - either "X" or "Y" - decides the sex of the offspring.

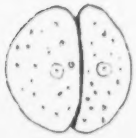
Female		**Male**
X	+	X = Female offspring
X	+	Y = Male offspring

IDENTICAL TWINS

FL111A



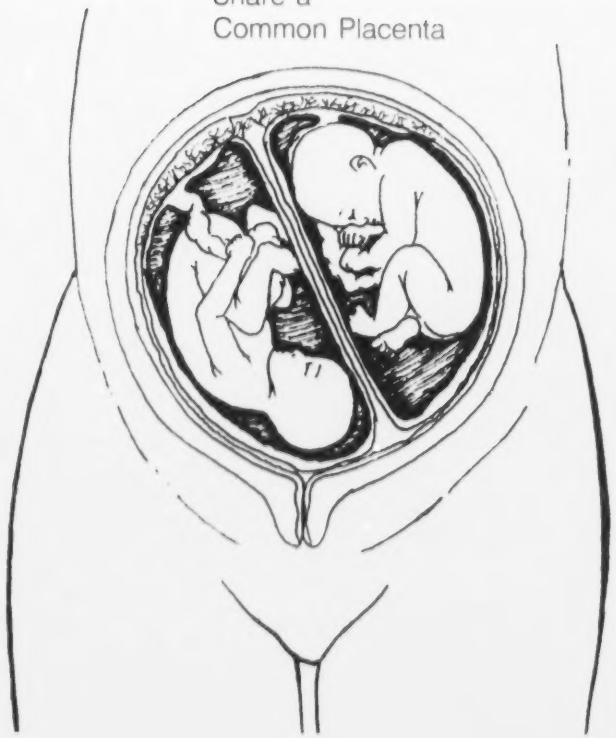
Single Egg
and Sperm



Divides

Identical
Chromosome

Share a
Common Placenta

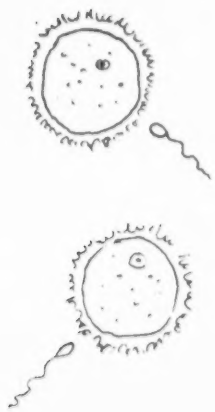


Girls

Boys

FRATERNAL TWINS

FL111B

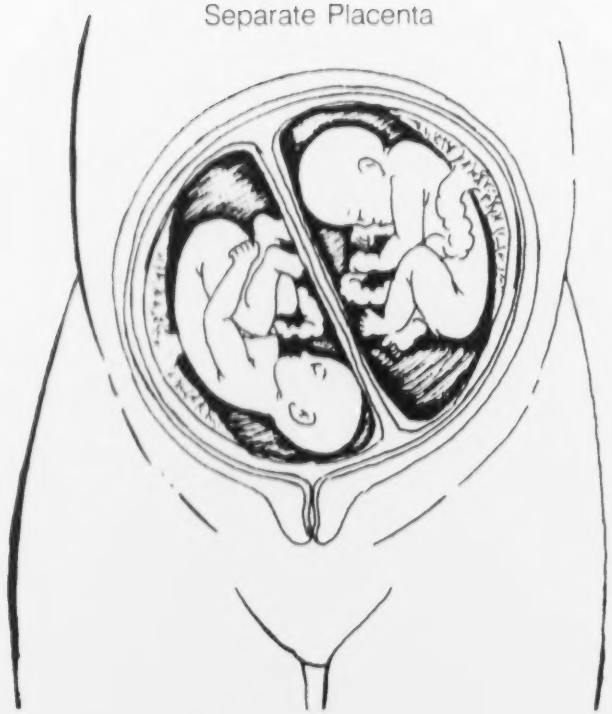


2 Eggs

2 Sperm

Different Chromosome

Separate Placenta



Possible Combinations

Girl and Boy

Girls

Boys

MULTIPLE BIRTHS

FL112A

Select the correct answer from the words listed below.

two the same one two two Identical sex the same

one male and female Fraternal one placenta

1. An identical twin develops from the union of_____sperm(s) and_____ovum (ova) which separate into_____offspring.
2. Identical twins are the same _____.
3. Identical twins share _____ placenta.
4. Fraternal twins develop from the union of _____ sperm(s) and _____ ovum (ova).
5. Fraternal twins can be both _____ or _____ sex.
6. Fraternal twins have a separate _____.
7. _____ twins are genetically the same.
8. _____ twins may not look alike.

MULTIPLE BIRTHS

FL112B

(Teacher Answer Guide)

1. An identical twin develops from the union of one sperm(s) and one ovum (ova) which separate into two offspring.
2. Identical twins are the same sex.
3. Identical twins share one placenta.
4. Fraternal twins develop from the union of two sperm(s) and two ovum (ova).
5. Fraternal twins can be both male and female or same sex.
6. Fraternal twins have a separate placenta.
7. Identical twins are genetically the same.
8. Fraternal twins may not look alike.

FAMILY LIFE

GRADE: 9 LESSON: 6 THEME: HUMAN DEVELOPMENT AND REPRODUCTION

CONCEPT: A FEMALE'S BODY UNDERGOES PHYSICAL CHANGES DURING PREGNANCY

PREPARATION: 1. Prepare overhead transparencies of Activity Sheets FL113, 114A, B, C and D

VOCABULARY: trimester, contraction, cervix

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the signs of pregnancy	Students: 1. Describe the signs of pregnancy.	Background Information: Page FL68 to FL71 Students have probably heard pregnant women or others discuss some of the indicators of pregnancy. Brainstorm how a woman knows she might be pregnant. Early signs of pregnancy include: - a missed menstrual period - frequent urination - enlarged breasts; tingling, tender - fatigue or depression or bursts of energy - morning sickness - nausea and vomiting that occur anytime during the day

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Emphasize that definite diagnosis of pregnancy can be made by the doctor or nurse. It is important that diagnosis be made early and that prenatal care be initiated early as well.
ii) describe some characteristics of the three trimesters of pregnancy	2. Describe some of the physical changes that usually occur in the mother during pregnancy.	Refer to Activity Sheet FL113. Using the overhead transparency, describe physical changes that occur in the mother.
ii) describe the stages of labour	3. Define the term 'labour'.	Use a dictionary to describe the term. Labour is the delivery of the baby from the mother's uterus. It consists of a series of muscular contractions of the uterus that occur at regular intervals, to help push the baby and placenta from the uterus, into the birth canal and out of the mother's body.
	4. Describe the stages of labour.	Refer to Activity Sheets FL114A, B, C and D. Using the overhead transparencies, discuss the stages of labour.

220 A

221 A

FL113

PHYSICAL CHANGES THAT OCCUR IN PREGNANT WOMEN

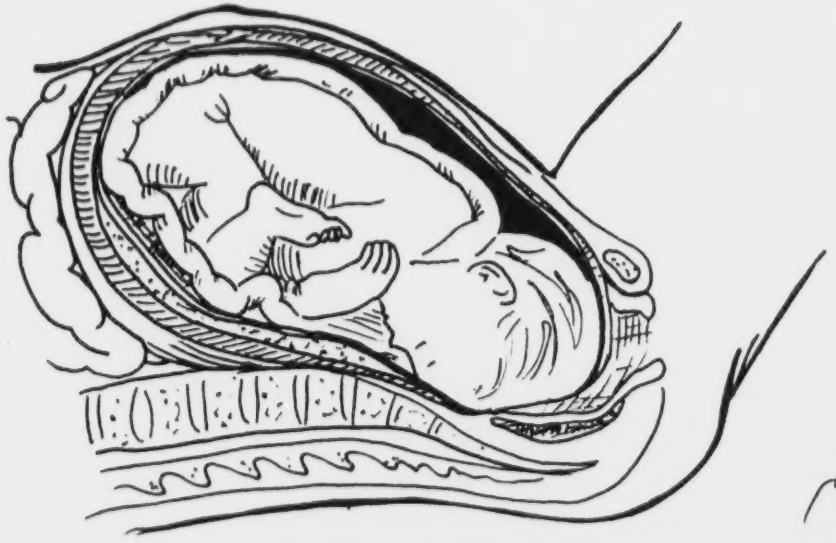
Time Period	Physical Changes in Pregnant Mother
first trimester (first three months)	- absence of menstruation - breasts enlarge and are sensitive - fatigue - nausea (morning sickness) - frequent urination - light-headedness - shortness of breath - increased vaginal secretions - small weight gain
second trimester (4-6 months)	- uterus rises up in abdomen (less nausea, less bladder pressure, less tired) - breasts may secrete liquid - movement of baby felt in uterus - may experience low back pain - more rapid weight gain (near end of second trimester)
third trimester (7-9 months)	- steady weight gain - purple or red marks on abdomen and breasts (stretch marks) - tire more easily - irregular contractions of uterus (false labor) - muscle cramps in legs (especially at night) - fatigue and some depression (feelings of awkwardness and impatience) - heartburn and frequent urination (pressure of uterus on stomach and bladder) - constipation - shortness of breath
3 - 4 days before labor	- breathing becomes easier when baby 'drops' - some weight loss - increase in 'false labour' contractions - less movement of baby - burst of energy

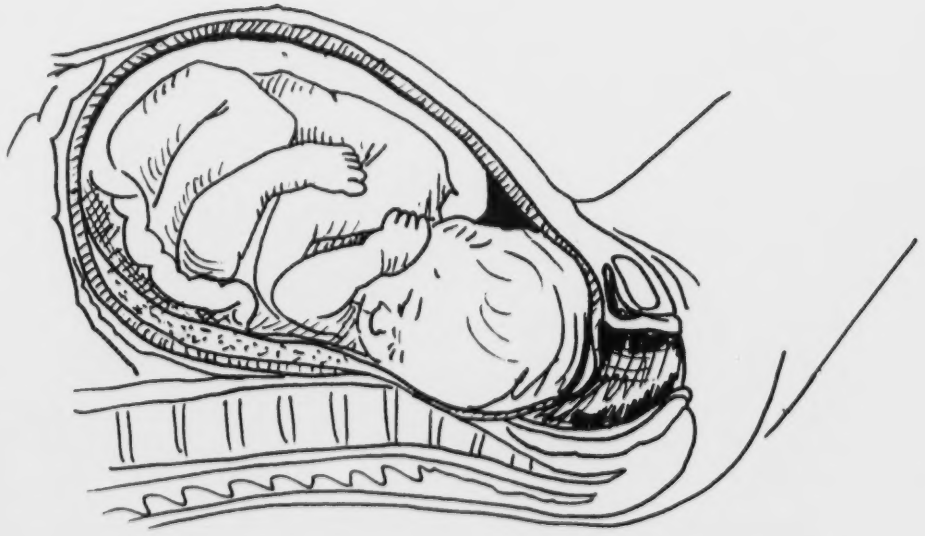
* Not all of these changes are experienced by all women.

FIRST STAGE OF LABOUR

FL114A

- Contractions begin
- Water breaks
- Cervix dilates

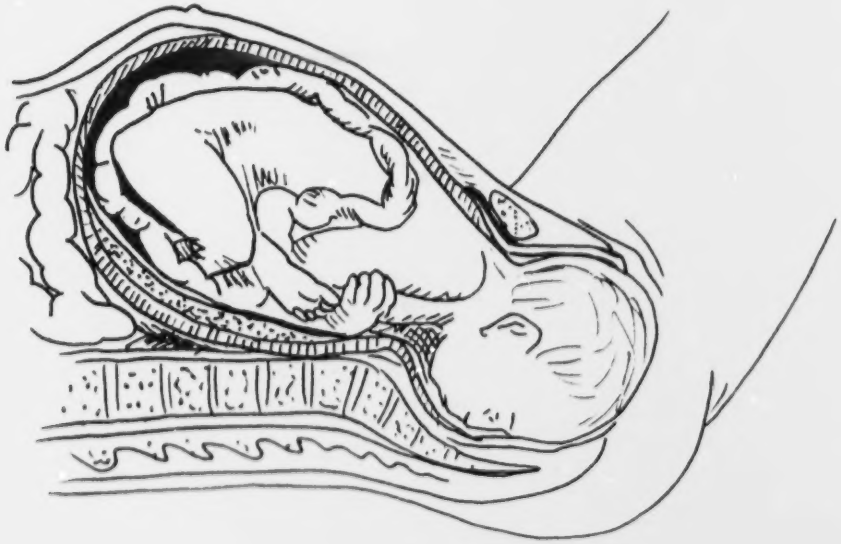




SECOND STAGE OF LABOUR

FL114B

- Actual birth
- Head shows first (usually)



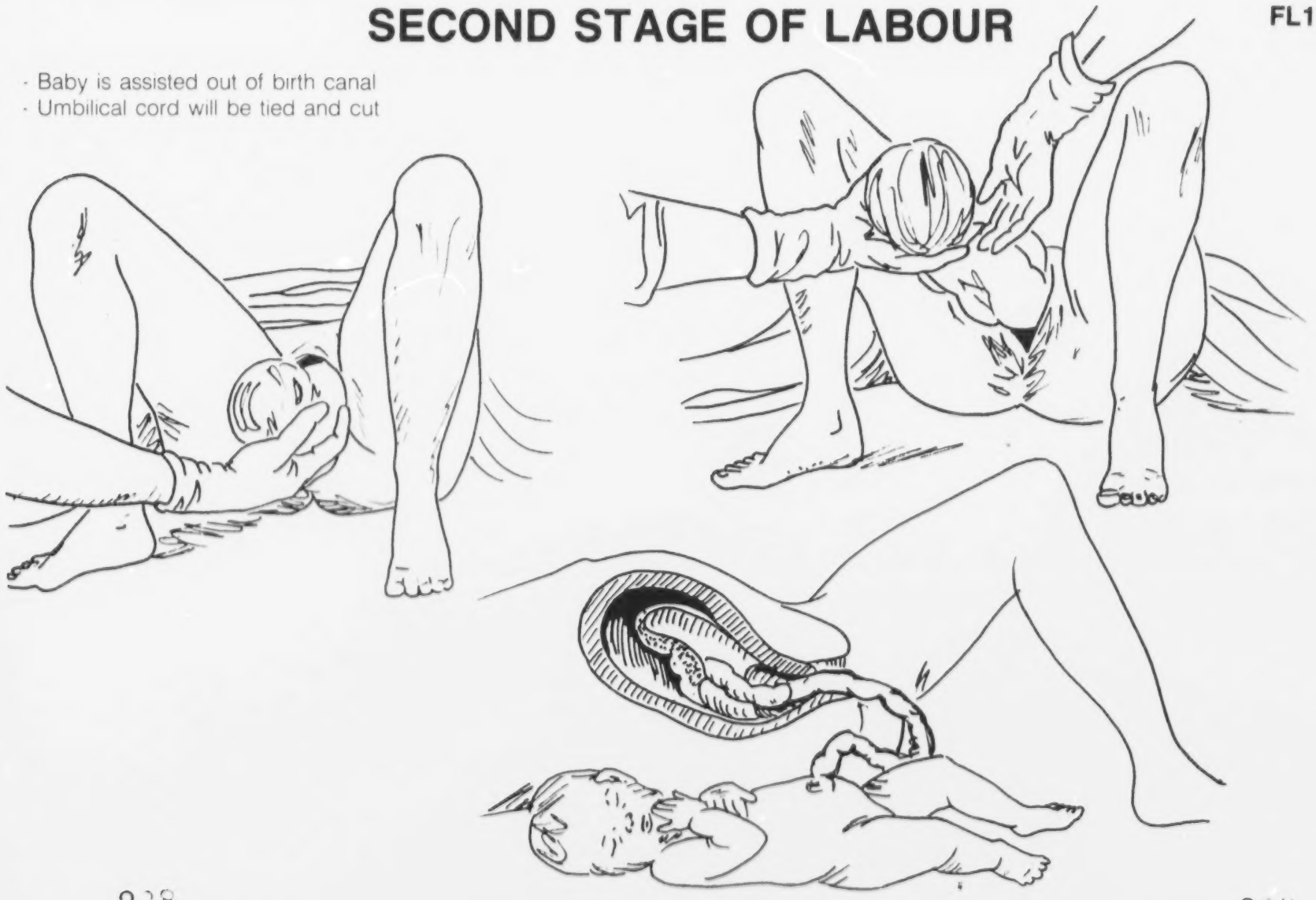
226

227

SECOND STAGE OF LABOUR

FL114C

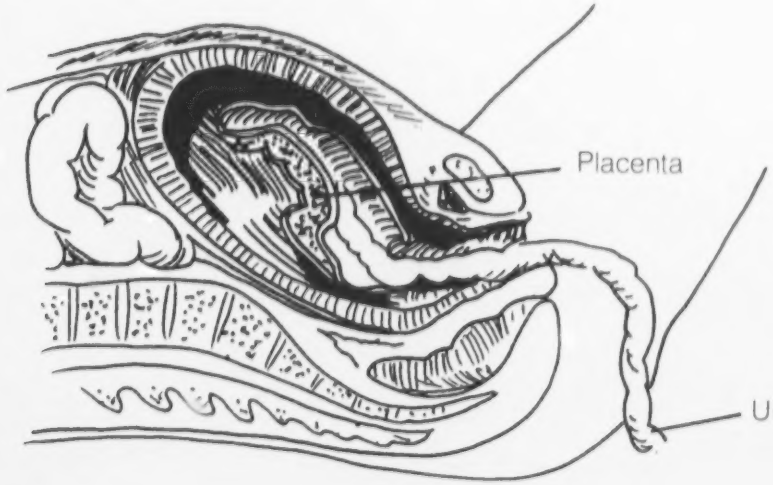
- Baby is assisted out of birth canal
- Umbilical cord will be tied and cut

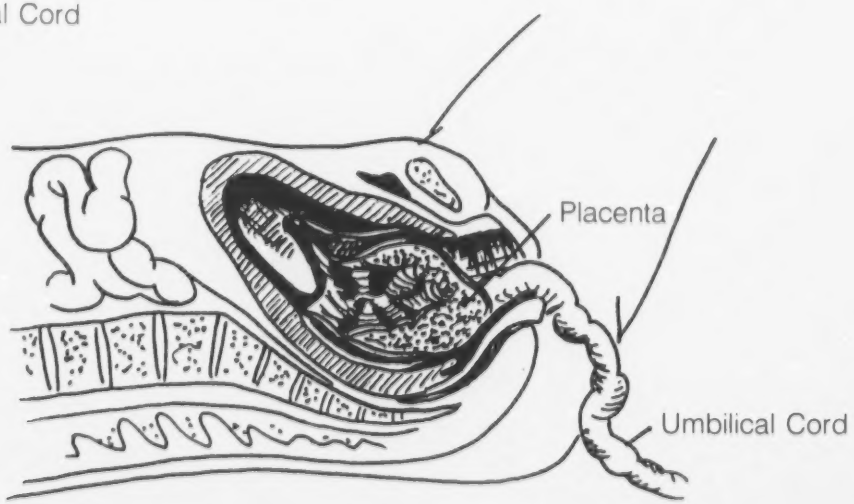


THIRD STAGE OF LABOUR

FL114D

- Placenta (afterbirth) is expelled from uterus by contractions





BEST COPY AVAILABLE

FAMILY LIFE

GRADE: 9 LESSON: 7 THEME: HUMAN DEVELOPMENT AND REPRODUCTION

CONCEPT: POSITIVE HEALTH BEHAVIOURS DURING PREGNANCY PROMOTE MATERNAL AND CHILD HEALTH

PREPARATION:
1. Prior to the class invite a community health nurse to the class to discuss prenatal care
2. Materials for making posters

VOCABULARY: prenatal

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students	Background Information: Page FL68 to FL71
i) describe positive health behaviours during pregnancy that promote maternal and child health	1. Explain what is meant by prenatal care.	Prior to the class, invite the community health nurse to the class to discuss appropriate pre-natal care. Prenatal care refers to proper medical care during pregnancy. This increases the chances that a baby will be born healthy and that the mother will have no serious health problems.
	2. Describe positive health behaviours that promote a healthy pregnancy	Examples of positive health behaviours include: - visiting the doctor/nurse ***before*** becoming pregnant (parental histories, hereditary diseases, physical check-up, immunization status) - consulting a doctor/nurse early to confirm pregnancy (and having complete medical exam to determine health status of pregnant woman)

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		- following doctor/nurse's advice re. dietary changes, weight gain, chemical substance use (i.e., medications, alcohol, nicotine), physical activity and avoidance of disease - visiting the doctor/nurse regularly - monthly, later more frequently to monitor position and growth of baby, baby's heartbeat - keeping the body clean to prevent infection and disease - practising proper posture to allow internal body organs to function efficiently and the fetus to grow larger - avoiding using drugs during pregnancy, whenever possible
	3. Give examples of ways the father can support the pregnant woman during pregnancy	It is important to emphasize that the male has a role to play during pregnancy. Ways he can support his pregnant wife include: - attending prenatal classes with her, so that he can help her during labour - visiting the doctor with her, if necessary - helping to ensure she follows the doctor's/nurse's advice - understanding that her body is undergoing physical changes - sharing household tasks with her
	4. Prepare a large poster or collage depicting positive health behaviours that promote a healthy pregnancy	During pregnancy, a woman is responsible for her developing baby. Both require special care. Health habits of a woman during pregnancy will affect the future health of her baby.

FAMILY LIFE

GRADE: 9 **LESSON: 8** **THEME: TEEN DECISIONS**

CONCEPT: OPINIONS DIFFER ON HOW TO DEAL WITH UNPLANNED PREGNANCY

PREPARATION: 1. Prior to the class, teachers should encourage students to discuss the topic of abortion with their parents

VOCABULARY: adoption, fostering, abortion

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to:	Students:	Background Information:
		The topics of abstinence and birth control have been taught in Grade 8. It is important for teachers to conduct an initial assessment to determine students' knowledge and understanding of these topics ***before*** this lesson is taught. If necessary, teachers should review the materials on these topics from Grade 8 with their students. Teachers should be aware of the extremely sensitive nature of this topic. Prior to and after the class, encourage students to discuss the topic of abortion with their parent(s).
i) identify alternatives which people might consider in dealing with unplanned pregnancy	1. Brainstorm ways of dealing with unplanned pregnancy.	Ask students to imagine that they (or their girlfriend) have just found out that they are pregnant. Brainstorm how they might feel. Brainstorm some alternatives they might discuss in trying to deal with the unplanned pregnancy.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Alternatives may include: - keeping the child (as a single parent or married) - giving the child to another family for fostering - giving the child to another family for adoption (formal or custom) * - abortion - having a grandmother bring up the child * It is important that students understand that abortion is ***not*** a method of birth control. Cultural attitudes of communities towards adolescent pregnancy may vary. The perception of difficulties facing a pregnant teenager may vary greatly between cultural settings. In some communities it may be common (custom) for a teenage mother to give her baby to a relative to raise. The child grows up knowing who his/her parents are.
	2. Describe the advantages and disadvantages of these alternatives.	Divide the class into small groups. Have them discuss the advantages and disadvantages of the alternatives. Record on a chart as illustrated. **Alternatives** | **Advantages** | **Disadvantages** Keeping the child | - natural mother raises the child | - lack of money - problems re: school/work - decision whether to marry or not After the groups have discussed the issues, ask if there was any disagreement on the issues.
	3. Discuss the topic of abortion.	Abortion is the ending of a pregnancy before the fetus is ready to be born. Emphasize that abortion is a controversial issue and it is important to respect different viewpoints.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		Encourage students to discuss this controversial issue with their parents and discuss the values and viewpoints of their parents. If teachers bring in resource people on this topic, it is important that both the 'Pro-Choice' and the 'Pro-Life' views be presented to students. Discussion on this topic could be conducted in the form of a debate. Tips for conducting a debate include: - Decide how many people will speak to each side of the debate. - Choose the students for each point of view. - Allow them some time for research on the topic. - Allow each side a specific length of time, say five minutes, to present their point of view. - Allow each side time, e.g., two minutes, for a rebuttal. - Allow a specific length of time for questions from the floor. - Allow each side one minute to sum up their argument. - Take a vote to determine which point of view has gained the most support.
ii) describe how to prevent unplanned pregnancy	4. Discuss the responsibilities which parenthood involves.	Parents must provide for the physical, mental, emotional, social, intellectual needs of their children. Brainstorm what these needs might be. Discuss.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	5. Brainstorm ways to prevent unplanned pregnancy.	Having a child involves a great deal of responsibility. Although they may be able physically to have a baby, young people are generally not prepared mentally, emotionally or socially for a stable relationship or the responsibility of looking after a baby. Ways to prevent unplanned pregnancy include: - abstaining from sexual activity - using birth control, if sexually active **AIDS** The AIDS lessons, developed for use with Grades 7, 8 and 9, should be taught at this point. Teachers should use the lessons labelled Grade 9. Refer to the document ***N.W.T. School Health Program, AIDS Component.***

FAMILY LIFE

GRADE: 9 LESSON: 9 THEME: LIFESTYLE

CONCEPT: POSITIVE LIFESTYLE PRACTICES PROMOTE HEALTH

PREPARATION:

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify positive lifestyle practices that promote healthy sexuality and family relationships	Students: 1. Select and prepare a report on a project related to human sexuality or family relationships to research, emphasizing those behaviours which have a positive influence.	Background Information: Have students select a topic to research and prepare a report on. Topics might include: - The importance of families - Building a strong family - Making responsible decisions related to human sexuality - Human reproduction - Family violence - Assertiveness and human sexuality Students may suggest other topics of interest. Students should emphasize positive lifestyle practices related to their topic of interest. Projects should be displayed in the class and shared with other students.

GRADE 9

TEACHER BACKGROUND INFORMATION

FAMILY LIFE

THE TERMINOLOGY OF THE FAMILY LIFE UNIT

Some students may have difficulty understanding or participating in the discussions because they have different words to describe the concept. Many students will know only the "common" or "slang" terminology. In the Family Life classes, students will be learning and using the medical terminology.

Medical Terminology	Common	Slang
urinating	peeing	pissing

Students may use the "common" or "slang" term initially, because they are comfortable using it, and/or do not know the medical term. Once the medical term has been taught in class, teachers should ensure that students refer to the concepts using the correct medical terminology.

SEX ROLE STEREOTYPING

Gender role identity begins to develop as soon as a baby is born, when s/he starts to fit into a society which provides the expectations or standards for his/her gender.

Gender roles are culture-specific and change with cultural transition. In some societies, for example, women may be expected to walk behind males, to ask their husband's permission before going out and to, generally, be subservient to them. In others, women have considerable power and may be the leaders of the culture.

Children learn their gender identity in early childhood and continue, through adolescence and adulthood, to observe and learn the cultural expectations for males and females.

Parents, in particular, but society, in general, reinforce gender identity and expectations

- by labels e.g., 'sweety-pie' or 'buster'; 'sweet' or 'tough'
- by providing gender-appropriate toys e.g., cars for boys, dolls for girls
- through the kind of clothes they buy their children e.g., frilly dresses or overalls
- through the behaviours they expect e.g., boys don't cry

Little girls who do not conform to society's expectations of them may be referred to as 'tomboys', and boys as 'sissys'.

Changing attitudes in North America towards gender role identity have become more prevalent in recent years. This has occurred partly as a result of activities such as the women's movement, changing social values e.g., the incidence of divorce and the increase in the number of women who work outside the home.

Nowadays, in western culture, males and females are recognized to have equal potential, and are more comfortable selecting, for example, jobs or activities which are beyond the traditional gender roles e.g., female truck drivers.

TERMS RELATED TO THE MALE REPRODUCTIVE SYSTEM

sperm: the male reproductive cell; it generally lives for 1 to 3 days; males do not begin to produce sperm until puberty

scrotum: the outer sac or bag which holds the testicles

testicles: two glands located inside the scrotum; these are where sperm are produced; it is common for each testicle to be slightly different in size

vas deferens: the tube which leads from each testicle to the urethra; sperm travels along this tube from the testicle to the urethra

prostate gland: a large gland which surrounds the male urethra in front of the bladder; it secretes fluids which lubricate the sperm

urethra: a tube inside the penis which carries both urine and semen to the outside of the body; semen and urine do not travel down the urethra at the same time

Cowper's glands: these glands secrete a small amount of fluid into the urethra just before the sperm reach this point

penis: an external body organ through which urine and sperm leave the body

ejaculation: the discharging of semen from the body through the penis

erection: the penis grows larger, becomes stiff and hard and sticks out from the body. This happens because blood flows into the loose skin of the penis. It can result from sexual stimulation (e.g., a sexual thought, seeing an attractive person, or from rubbing the penis) or spontaneously without any apparent reason. Erections are a natural occurrence which tend to happen more frequently during puberty.

wet dreams: ejaculations which occur at night as a result of a dream

masturbation: the rubbing or stroking by a person of his/her own sexual parts. Masturbation does not cause physical harm. It is normal if a person chooses to masturbate. It is also normal if a person chooses not to masturbate.

epididymus: where sperm cells are stored before travelling along the vas deferens

seminal vesicle: produces fluid which provides nourishment and lubrication for the sperm

THE REPRODUCTIVE SYSTEM (MALE)

seminal vesicle - releases fluid which nourishes the sperm and allows it to travel more easily along the vas deferens
vas deferens - carry the sperm from each testicle to the urethra
prostate gland - adds fluid to the sperm to make semen
penis - holds the urethra which carries the sperm and urine out of the body at different times
urethra - carries semen and urine out of the body
Cowper's gland - releases fluid into the urethra
epididymus - stores mature sperm before they enter the vas deferens
testicle - produces sperm and the hormone testosterone
scrotum - the bag which holds the testicles

FL64

TERMS RELATED TO THE FEMALE REPRODUCTIVE SYSTEMS

egg (ovum): the female reproductive cell; it generally lives for 2 to 3 days; females are born with eggs; eggs are stored in the ovaries; at puberty the ovaries start to release one egg a month; ovum - singular; ova - plural

vulva: the area situated between the legs which protects the openings of the vagina and the urethra; on either side of the vulva are soft folds of tissue called labia; this does not include the anus

vagina: the opening through which blood and tissue leave the body at menstruation; the opening through which the male penis enters during sexual intercourse; the opening through which a baby is born

cervix: the neck of the uterus; opening between uterus and vagina

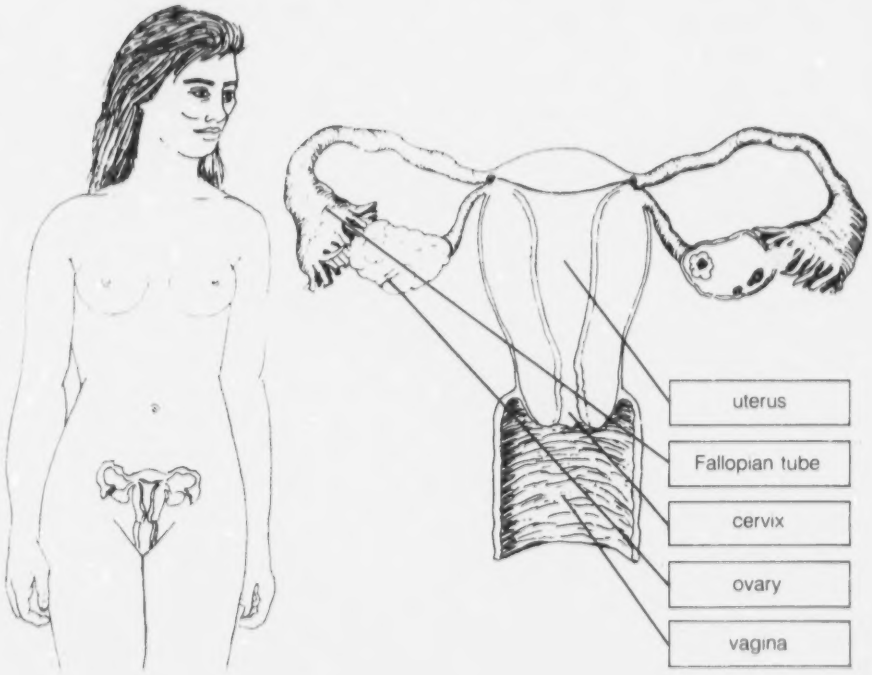
uterus: a muscular pear-shaped organ; where the fertilized egg grows and develops into a fetus; each month the lining of the uterus thickens to receive an egg; if the egg is not fertilized, the lining of the uterus leaves the body during menstruation

ovaries: the organs where the eggs are stored and develop; once a month, an egg matures and is released from one of the ovaries; the ovaries contain thousands of tiny, undeveloped egg sacs

Fallopian tubes: two tubes which connect the ovaries and the uterus. The released egg travels from the ovaries along the Fallopian tubes; hairs on the walls of the tubes help the egg to move along; the sperm fertilizes the egg in the Fallopian tubes.

ovulation: the point in the menstrual cycle when an ovum or egg cell is released from an ovary; occurs 14 to 16 days after the first day of menstruation

THE REPRODUCTIVE SYSTEM (FEMALE)



HEREDITY

Both the sperm and egg cells carry specific genetic information. This information is contained in the ***chromosomes.*** The sperm and egg each have 23 chromosomes. When they unite, the ***zygote*** which they form has 46 chromosomes. Chromosomes are made up of smaller units called ***genes***. Genes determine every characteristic of the offspring.

Half of a baby's chromosomes come from the mother's egg and half come from the father. This means the baby becomes a unique mixture of its mother and father.

A child can inherit many things from his/her parents

- physical appearance
- hair colour
- eye colour
- skin colour
- attached or unattached ear lobes
- certain diseases e.g., muscular dystrophy

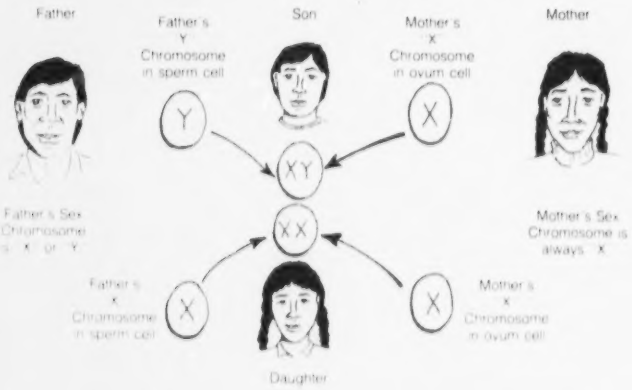
SEX DETERMINATION

Genes control every aspect of the growth of the new baby, including what sex the baby will be. One out of the 23 chromosomes that an egg and sperm each have is responsible for deciding whether a baby will be a boy or a girl. In the egg cell this ***sex*** chromosome is called an ***(x)*** sex chromosome. A sperm cell, however, can produce 2 kinds of sex chromosomes, either ***(x)*** or ***(y)***

So, if a sperm cell, which has an ***(x)*** sex chromosome, joins with an egg cell, whose sex chromosome is always ***(x)***, the new cell they form will have a pair of sex chromosomes ***(x,x)***. This ***(x,x) pair*** will mean that the baby will be a female.

If a sperm cell, which has a ***(y)*** sex chromosome joins with the egg cell the new cell they form will have a pair of ***(x,y)*** sex chromosomes. (Remember the egg cell always has only an ***(x)*** sex chromosome.) This ***(x,y) pair*** will mean that the baby will be a male.

DETERMINATION OF THE SEX OF OFFSPRING


Father
Father's Y Chromosome in sperm cell
Son
Mother's X Chromosome in ovum cell
Mother
Father's Sex Chromosome is 'X' or 'Y'
Mother's Sex Chromosome is always 'X'
Father's X Chromosome in sperm cell
Mother's X Chromosome in ovum cell
Daughter

The offspring gets half its chromosomes from the mother and half from the father. The father's sex chromosome - either 'X' or 'Y' - decides the sex of the offspring.

Female		Male
X	+	X = Female offspring
X	+	Y = Male offspring

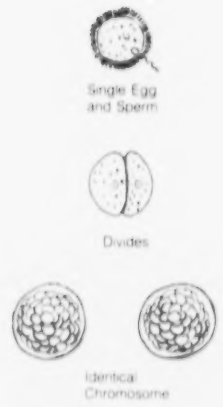
MULTIPLE BIRTHS

Once the egg is fertilized by the sperm it usually grows into a ***single*** embryo. However, sometimes, the fertilized egg divides into ***two separate*** cells and each cell goes on to grow and develop separately. Each grows into a baby. Because both came from the same fertilized egg they share the same set of chromosomes. Consequently, these two babies develop into ***identical*** twins. Because they share the same set of chromosomes they will look exactly like each other and be the same sex.

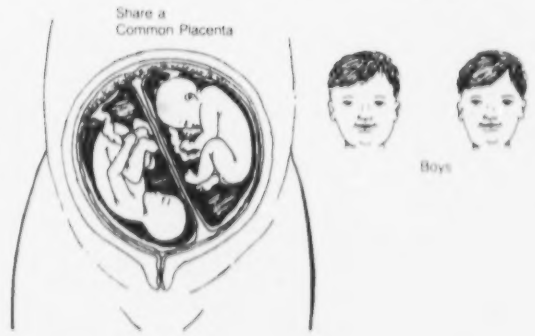
Siamese twins develop when the initial separation of the cells into two cell masses is not complete.

Fraternal twins develop when two different eggs are fertilized by different sperm at the same time. Normally a female only releases one ovum a month in ovulation but occasionally it does happen that two are released. Fraternal twins do not have the same set of chromosomes and may be different sexes.

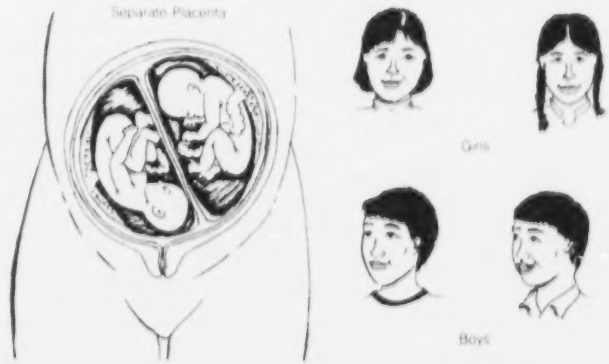
Triplets usually result from the fertilization of two different ova. One of the fertilized ova separates and develops into identical twins. Triplets develop about once in 6,400 cases.



IDENTICAL TWINS



FRATERNAL TWINS



FETAL DEVELOPMENT

The union of the sperm and the egg is called ***fertilization*** or ***conception.*** When a female becomes pregnant, she has ***conceived.***

Fertilization, or conception i.e., the union of the sperm and the egg usually takes place in the Fallopian tube. The new cell that is formed from this union begins a process of cell division to form a small mass of cells joined together, called an ***embryo.*** This embryo then begins a journey to the uterus, where it will develop into a baby. The trip from the Fallopian tube to the uterus can take up to a week.

Once the embryo has reached the uterus it attaches itself to the inner lining of the uterus, called the ***endometrium.*** The endometrium will supply the embryo with the food and protection it needs to survive. The transfer of nutrients and oxygen to the embryo takes place through the rich blood supply of the endometrium. The initial formation of the embryo takes about eight weeks after which time it is called a ***fetus***.

During the first ten weeks of pregnancy, a mass of tissue called the ***placenta*** develops. It grows between the fetus and the endometrium. It allows for a better exchange system between the fetus and the mother's uterus. The placenta acts like a screen between the fetus and the uterus. The mother's blood carries nutrients and oxygen to the placenta where, through an exchange system, the fetal blood picks up the food and oxygen it needs. The blood of the mother and blood of the fetus do not mix together.

The placenta is attached to the fetus by a special cord called the ***umbilical cord.*** So the nutrients and oxygen are screened through the placenta and travel to the fetus through the umbilical cord. (After a baby is born the nurse/doctor will cut, or tie off, the umbilical cord between the baby and the placenta as the baby doesn't need it anymore.)

Besides allowing for the exchange of nutrients and oxygen from the mother to the fetus the placenta also acts as a ***barrier***. It helps to prevent any harmful substances that may be in the mother's body from passing over to the fetus. However, some of these substances are the right shape to pass through the placenta screen and then circulate through the body of the fetus which is not physically mature enough to fight off the harmful substance.

For example, it is very dangerous for a pregnant woman to get ***rubella*** or German Measles. Most people have had rubella. If a female who has not had rubella gets it when she is pregnant it is very dangerous, not to the woman but to the baby she is carrying. The measles ***virus*** crosses the placenta screen and goes into the developing fetus. It can cause damage to the baby, e.g., deafness, blindness, brain damage and heart damage. This is why any woman who is planning to become pregnant and has not had rubella should have a rubella immunization ***before*** becoming pregnant.

The poisons in cigarette smoke will also cross the placenta and go into the fetus. Women who smoke during pregnancy generally have babies who have a low birth weight. This can cause problems for the baby. The effects of alcohol on the fetus are also harmful. Alcohol crosses the placenta and causes damage to the fetus including brain damage and physical defects. A female who drinks regularly, or even drinks occasionally but drinks a lot at the time, is putting her child at great risk. Since science doesn't yet know exactly how much alcohol can cause damage, a pregnant woman should avoid the use of alcohol.

At the same time as the placenta and umbilical cord are developing a thin, but strong sac develops around the placenta and fetus. This sac, called the ***amniotic sac***, attaches itself to the endometrium keeping the fetus surrounded by water and protein. The purpose of the amniotic sac is to provide protection for the fetus so that when the mother moves around the movements of the fetus in the uterus are restricted. The sac also absorbs waste materials excreted by the fetus.

From the time the baby is conceived (when the sperm cell and the egg cell unite) until the time the baby is fully developed and ready to be born is about ***nine months*** or ***forty weeks.***

During these nine months the fetus develops the shape and parts of a human being. It starts out very small and does not look like a human being at all. But as time passes it grows and develops to look like the babies we are used to seeing. This time of development before birth is called ***prenatal development.***

The prenatal development of the fetus can be divided into three periods of time. The first, second and third months of pregnancy are the ***first trimester;*** the fourth, fifth and sixth months the ***second trimester*** and the seventh, eighth and ninth months the ***third trimester***.

First Trimester

During this ***first trimester*** the fetus grows very rapidly. All the major organs of the body develop then. For example, the heart is actually beating within the first month. By the end of the first trimester the fetus looks like a miniature human being. It has a mouth, eyes and ears. They are not completely formed but the basic structures are there. The arms, hands, fingers, legs, feet and toes are also formed. Even the fingernails have begun to form.

Second Trimester

During the second trimester the body organs continue to develop. The fetal digestive system is functioning. Soft bones are developing and the muscles begin to move. It is during the second trimester that the mother first feels the movement of the baby. Eyebrows and eyelashes are formed by the end of the second trimester.

Third Trimester

Most of the weight of the baby develops during this last trimester. It gains approximately six pounds during this time. This weight is very important as it helps the baby survive better after it is born.

During this last trimester the fetal organs and systems are fairly well-developed except for the ***lungs***. The last trimester is a very important time for the development of the lungs. Babies born early often have breathing problems because their lungs are not fully developed.

Each of these trimesters is important in terms of the baby's growth and development. But the ***first*** trimester is the most crucial because all the major body organs form at this time. For example, if the fetus, during the first trimester, does not receive adequate nutrition from the mother the damage done can be serious and permanent. The growth of organs, systems and shape can be stunted. Unfortunately, a woman may not realize she is pregnant until often one or two months have passed and she may be practising lifestyle habits which are potentially harmful to the fetus e.g., drinking alcohol.

In order to give her baby the best chance for healthy development a woman should practise good health habits before and during pregnancy.

CARE OF THE BABY AFTER BIRTH

Once the baby is born the doctor or nurses or whoever is attending the birth remove any blood, amniotic fluid or mucous which may have accumulated in the baby's mouth and nose. The baby is then checked to see if it has begun to breathe on its own. One of the first things a newly born baby does is take a breath using his lungs for the first time. S/he also usually starts to cry. This cry means that the baby is breathing on its own. The doctor/nurse or father cut and tie off the umbilical cord which attached the baby to the placenta. This does not hurt the baby or the mother as there are no nerve endings in the umbilical cord. The stub left on the baby will eventually dry up leaving the mark we commonly call our "navel". The baby is then given to the mother.

Following childbirth the process of milk secretion from the mother's breasts begins - ***lactation.*** Milk is not produced immediately after birth but from two to five days later. The first secretions the baby receives from the breasts are called ***colostrum*** which is a substance of high protein content and is thought to help prevent infectious diseases during the baby's first months. Some doctors also think that colostrum helps clean mucous from the baby's intestines.

BONDING

The development of a strong emotional attachment between the parents and their baby is important to the healthy physical and emotional growth of the baby. This strong emotional attachment is called ***bonding***. It begins at birth. It is important that the baby receive physical and emotional affection in addition to suitable physical care.

Many people believe that the process of bonding is aided by the father's presence at and involvement in the birth and by the mother nursing the baby.

PROBLEMS IN DELIVERY

Most births are normal but sometimes problems arise. For example, usually a baby is born head first. But sometimes a baby's bottom, legs or shoulders come out first instead. This type of birth is called a ***breech*** birth. The positions of a breech birth make the birth more difficult as the cervix at this point in the birth has opened enough for the head but not for anything bigger. When the head comes first it helps the cervix stretch a little more to accommodate the bigger parts of the body as they follow the head. But when the bigger parts come first the cervix does not have a chance to open gradually and is strained.

It may also happen that the umbilical cord becomes twisted around the baby's neck. This is dangerous for the baby as the cord may be twisted tightly and may cut off the circulation of blood to the baby's brain. The doctor or nurse then has to untwist the cord and free the baby.

If these or any other problems create any danger for the baby or the mother it may be necessary for the doctor to cut through the mother's abdomen wall and uterus and lift the baby out this way. After removing the baby the doctor sews up the wall of the uterus and abdomen. This type of procedure to deliver a baby is called a ***Caesarian section.***

There are a number of different techniques people use to prepare for childbirth. Community health nurses at public health clinics or the nursing stations offer ***prenatal classes*** where the father and mother-to-be learn about physical and psychological training, muscle control, breathing exercises and education on the changes occurring during pregnancy, labour and delivery.

PHYSICAL CHANGES EXPERIENCED BY FEMALES DURING PREGNANCY

As the fetus develops, there are a number of effects the pregnant woman may feel. She will experience a weight gain, of anywhere between 10-13 kilograms. She may experience feelings of nausea and vomiting. This is called "morning sickness" although it can happen at any time of the day. Morning sickness is more common during the first trimester than at any other time during pregnancy. It is caused by increased amounts of hormones circulating through the body. It takes some time for the body to get used to these increased amounts of hormones. It is a very normal part of pregnancy. Not all women, however, experience morning sickness.

A pregnant woman's breasts become sore and may feel heavy, itchy or painful. They also usually enlarge during pregnancy as they develop the capacity to give milk. There may also be a definite increase in frequency of urination as the developing fetus places some pressure against the bladder.

CHILDBIRTH

It is important to remember that the uterus is mostly made up of ***muscle.*** It is this muscle which stretches during the nine months of pregnancy to fit the size of the growing fetus.

Besides being very stretchy, the muscles of the uterus, like all muscles of the body, can contract. When the muscles of the uterus contract they have the effect of pushing the baby out of the uterus. A woman's uterus always contracts a little bit during the pregnancy but it is not until the baby is ready to be born that the contractions are strong enough or frequent enough to push the baby out.

The process of childbirth is often called ***labour.*** Labour can be divided into ***three stages.*** During the ***first*** stage of labour a number of events occur which signal the woman that her baby is getting ready to be born. These events don't always occur in the exact order given.

First Stage of Labour

The main event of the first stage of labour is that the ***cervix*** begins to gradually stretch open or ***dilate***. With this dilation a mucous plug which plugged the cervix and helped maintain a complete barrier between the uterus and vagina is expelled through the vagina. As the cervix continues to widen the baby's head becomes positioned lower. The ***amniotic sac*** breaks and the fluid drains out through the vagina.

Also, during this first stage, the uterus begins to ***contract***. The amount of time between ***contractions*** varies between women as does the length of time for this first stage. Often the contractions begin with 20-30 minutes between each contraction. They become more frequent until they are only 2-3 minutes apart. These contractions cause discomfort for the woman. The amount of pain varies from woman to woman. Special breathing exercises can help the woman deal with the discomfort and, if necessary, drugs can be given which will reduce any pain.

This first stage may last up to 24 hours in a woman's first pregnancy. It generally lasts about 8 hours for the next one(s). These are average figures and vary from woman to woman and birth to birth.

Second Stage of Labour

The second stage of labour begins when the cervix (the opening between the uterus and the vagina) is completely dilated or widened. The baby is pushed by muscular contractions through the vagina (birth canal). Usually the head of the baby appears first as it begins its passage through the vagina. We call the first appearance of the head coming through the vagina the ***crowning***. After the head and shoulders of the baby emerge, the rest of the body comes out easily. Sometimes the opening to the vagina is not large enough so the skin is cut to make the opening larger. This is called an ***episiotomy.*** It is simple to repair and heals rapidly.

This second stage of labour lasts about two hours for a first delivery and about one hour for subsequent deliveries.

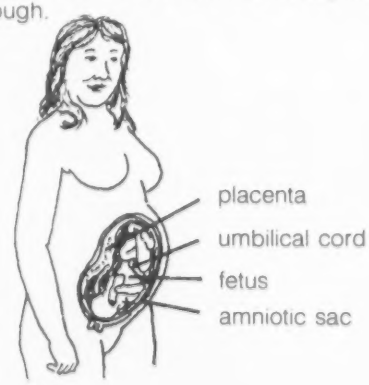
Third Stage of Labour

Although the baby is now born there is still one more stage left to the birthing process. The placenta is still inside the woman's body. Since it is no longer needed the contractions continue to force the placenta cord and membranes out of the uterus. Once these are expelled the birthing process is complete.

Prematurity

When a baby is born earlier than 40 weeks it is ***premature.*** This means that the baby was born before it was fully mature. Premature babies usually need special care after they are born and often have to stay in the hospital until they are strong enough.

PREGNANCY



FL71